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ABSTRACT

This catalog and career decision guide provides information for students on the programs and services offered by Illinois Valley Community College (IVCC) for 1985-86 and 1986-87. After introductory material provides information on admissions and the college calendar for 1985-86 and 1986-87, a history of the college and its educational philosophy is presented. The following sections provide information on student services including the student development program and other services for students; financial aids including grants and scholarships; and continuing education programs. The next section provides student status information on student classification, grading policies, withdrawals, scholastic requirements, graduation requirements, transfer credit, military service credit, and tuition and fees. Following information on student activities and organizations, the university transfer specialties in 32 fields leading to the degrees of associate in arts and associate in science are highlighted. The following sections present the associate in applied science and certificate programs at IVCC; cooperative agreements with other community college districts; and course descriptions. Finally, a list of staff, an application for admissions, and a career planning information section are provided. (HB)

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ILLINOIS VALLEY COMMUNITY COLLEGE

CATALOG AND CAREER DECISION GUIDE

Illinois Valley Community College
2578 E. 350th Road
Oglesby, Illinois 61348-1099
Telephone 815/224-2720

JC 850 324

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Community College District No. 513

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ABSTRACT

THE COMMUNITY COLLEGE CATALOG AND CAREER DECISION MAKING

ILLINOIS VALLEY COMMUNITY COLLEGE PROVIDES STUDENTS WITH MORE THAN A TRADITIONAL COLLEGE CATALOG. A NEW AND INNOVATIVE DIMENSION FOR CAREER EXPLORATION THAT CAN BE UTILIZED BY COUNSELORS WORKING WITH STUDENTS FROM JUNIOR HIGH THROUGH ADULT STUDENTS HIGHLIGHTS ITS NEW APPROACH TO A COLLEGE CATALOG. CURRICULUM PAGES HAVE BEEN CODED TO CORRESPOND TO JOHN HOLLAND'S ENVIRONMENTAL CODES WHICH ARE USED WITH SEVERAL VOCATIONAL INTEREST INVENTORIES. INFORMATION ON NATURE OF THE WORK, FUTURE JOB OUTLOOK, TRAINING REQUIRED, AND CAREER LEADS IS PROVIDED AS SUPPORT FOR EACH OF THE COLLEGE'S CERTIFICATE, APPLIED DEGREE, AND TRANSFER DEGREE CURRICULUMS.

THIS INNOVATIVE CATALOG CONCEPT PROVIDES COUNSELORS WITH A ONE-STOP SERVICE. IT COMBINES INTEREST TESTING TOOLS WITH CORRESPONDING CAREER CODED CURRICULUM CHOICES WHICH IN TURN PROVIDE MUCH IMPORTANT OCCUPATIONAL OUTLOOK AND CAREER INFORMATION. LOW COST PRODUCTION HAS PROVIDED FOR WIDE-SPREAD DISTRIBUTION FOR POTENTIAL STUDENTS, COUNSELORS, AND SOCIAL AGENCY PERSONNEL.

OUTREACH AND SERVICE

SERVICE IS THE WORD WHICH BEST DESCRIBES WHAT IVCC IS ABOUT. SINCE WE ARE A COMPREHENSIVE COMMUNITY COLLEGE, THAT SERVICE IS BY NO MEANS LIMITED TO TRADITIONAL COLLEGE-AGE STUDENTS. WE ARE EQUALLY COMMITTED TO SERVING THE ELDERLY, THE UNEMPLOYED, THE ADULT WHO IS NOT A HIGH SCHOOL GRADUATE, BUSINESS, INDUSTRY, LOCAL GOVERNMENTAL AGENCIES, AND ALL THE DIVERSE INDIVIDUALS AND VARIED CONSTITUENCIES OF OUR COMMUNITY WHO CAN PROFIT FROM WHAT THE COLLEGE HAS TO OFFER.

AL WISGOSKI
PRESIDENT

QUALITY IN THE CLASSROOM

THE NUMBER ONE GOAL OF IVCC THROUGHOUT ITS HISTORY HAS BEEN TO PROVIDE THE BEST QUALITY CLASSROOM INSTRUCTION. THE OUTSTANDING SUCCESS OF OUR GRADUATES, BOTH AT THE UNIVERSITY AND IN THE WORKPLACE, PROVIDES ONGOING TESTIMONY TO THE COLLEGE'S SUCCESS IN ACHIEVING THAT GOAL. IN ADDITION TO UNDERGRADUATE INSTRUCTION UNSURPASSED IN ILLINOIS, IVCC STUDENTS HAVE ACCESS TO MODERN CLASSROOMS, FINE EDUCATIONAL SUPPORT SERVICES AND LABORATORIES WITH THE LATEST IN HIGH TECHNOLOGY EQUIPMENT.

HANS A. ANDREWS
DEAN OF INSTRUCTION

WHAT IS STOPPING YOU?

Do you want to attend the community college?

...but fear your previous learning skills are inadequate?
...or have you been out of school for a number of years?
...or did you lack an interest in education in the past?

AT ILLINOIS VALLEY COMMUNITY COLLEGE we have a place for you...and a means of helping you to acquire your confidence in yourself as well as to acquire and develop the basic skills necessary to succeed in college classroom work.

HOW DO WE DO IT?

HOW DO WE ASSIST YOU TO BRIDGE THE GAP?

ONE — Through personal interest in you through our counselors who will assist you to decide upon courses and programs best suited to your needs.

TWO — Through WRITING and READING IMPROVEMENT programs. Through an ARITHMETIC program for college students.

FOR AN APPOINTMENT WITH A COUNSELOR CALL (815) 224-2720, Ext. 360

WRITING IMPROVEMENT

REVIEWS & HELPS YOU IN:

Grammar and Usage
Punctuation and Mechanics
Vocabulary and Spelling
Writing Skills
Examination Writing
(and other areas)

READING IMPROVEMENT

REVIEWS & HELPS YOU IN:

Textbook Reading
Reading Speed
Vocabulary
Listening and Lecture Note Taking
Organizing for Tests
Phonics and Spelling
(and other areas)

ARITHMETIC FOR COLLEGE STUDENTS

Reviews and Helps You In: A review of the basic operations (addition, subtraction, multiplication, and division), with whole numbers, fractions, and decimals (and other areas of need).

FOR ADDITIONAL INFORMATION CALL OR WRITE IVCC.

ADMISSIONS

How to be Admitted to Illinois Valley Community College

Illinois Valley Community College has an "open door" admission policy. Any high school graduate or mature person with equivalent educational background is eligible for admission. Admission to programs are on an open admission with the exception of registered nursing and licensed practical nursing (See Nursing curriculum pages for specified program admission criteria.)

IF YOU PLAN TO ATTEND FULL-TIME: You need to file an application for admission, high school transcript (or G.E.D. test results), and all previous college transcripts. Students in high school should submit American College Test (A.C.T.) results (full-time status is equivalent to 12 semester hours or more in a semester).*

IF YOU PLAN TO ATTEND PART-TIME; It is not necessary to file any advanced application or academic records. These records may be useful, however, when working with a college counselor. (Part-time is equivalent to 11 or less semester hours in a semester.)

IF YOU HAVE NEVER COMPLETED HIGH SCHOOL: You may enroll for part-time or full-time. (People who have discontinued high school may enroll after their high school class has graduated - or may obtain a certificate of severance from the superintendent or principal in the high school district in order to begin IVCC courses earlier.)

FOREIGN STUDENT admission requests should be made directly to the Director of Admissions Office - specific requirements will be mailed.

The college accepts the responsibility of assisting students in the selection of courses and programs that will be in the student's best interest. Placement tests may be administered for full-time students to assist in proper placement in English, reading, mathematics, and science courses.

POLICY - 16 & 17 YEAR OLD STUDENTS

High School Agreement

High school students ages 16 and over will, with written consent of the high school principal, counselors, or other authorized official, be permitted to enroll at IVCC. Such students must bring this written authorization with them at the time of registration or include it with the mail-in registration form.

The high school official must specify the number of courses or semester hours and the particular courses for which the student may enroll, as well as whether the credits earned will be utilized to fulfill high school requirements or held in escrow as college credits until after high school graduation.

*While not required for admission, ACT test results are preferred and are used in course placements.

AN APPLICATION FOR ADMISSION IS AVAILABLE
IN BACK OF CATALOG OR AT AREA HIGH SCHOOLS
OR FROM IVCC ADMISSIONS OFFICE.

New Student
Registration Begins:
June 24

ILLINOIS VALLEY COMMUNITY COLLEGE

CALENDAR 1985-1986

FALL SEMESTER, 1985

Thursday, August 15	Division In-Service for Faculty
Friday, August 16	Faculty Fall Conference Day Orientation of New Faculty
Monday, August 19	Classes Begin
Friday, August 23	Late Registration Ends for Day Classes
Thursday, August 29	Late Registration Ends for Evening & Off-Campus Classes
Friday, August 30	Last Date for Partial Refund
Monday, September 2	Labor Day (College Closed)
Wednesday, October 16	Mid-Term
Thursday, Friday October 17 and 18	Mid-Semester Break for Faculty & Students
Friday, November 8	Last Date for Automatic Withdrawal/Passing
Monday, November 11	Veterans' Day (College Closed)
Wednesday (Noon), Thursday, Friday November 27, 28, 29	Thanksgiving Vacation (College Closed)
Monday, December 2	Classes Resume
Friday, December 6	Last Date for Student Withdrawal
Monday, Tuesday, Wednesday, Thursday December 16, 17, 18, 19	Semester Exams
Friday, December 20	Final Grades Due in Records Office 1:00 p.m.
Friday, December 20	Semester Ends
Friday, December 20 through Monday, January 6	Faculty & Student Vacation
Tuesday, December 24, Wednesday, December 25, Thursday, December 26 and Tuesday, December 31, and Wednesday, January 1	Holidays for Staff (College Closed)

New Student
Registration Begins:
November 10

SPRING SEMESTER 1986

Wednesday, January 8	In-Service for Faculty
Thursday, January 9	Classes Begin
Tuesday, January 14	Late Registration Ends for Day Classes
Tuesday, January 21	Late Registration Ends for Evening & Off-Campus Classes
Tuesday, January 21	Last Date for Partial Refund
Friday, February 14	Lincoln's Birthday (College Closed)
Friday, March 14	Mid-Term
Friday, March 14	Faculty College/Industry Visits
Monday through Friday, March 17-21	Spring Vacation for Faculty & Students
Monday, March 24	Classes Resume
Friday, March 28	Good Friday (College Closed)
Wednesday, April 2	Last Date for Automatic Withdrawal/Passing
Wednesday, April 30	Last Date for Student Withdrawal
Thursday, Friday, Monday, Tuesday May 8, 9, 12, 13	Semester Exams
Wednesday, May 14	Final Grades Due in Records Office 1:00 p.m.
Friday, May 16	Semester Ends
Friday, May 16	Commencement

New Student Registration Begins: April 21

PRE-SUMMER AND SUMMER SESSIONS, 1986

PRE-SUMMER SESSION

Tuesday, May 20	Last Day for Registration
Wednesday, May 21	Pre-Summer Session Begins
Friday, May 23	Last Day for Partial Refund
Friday, May 30	Memorial Day (College Closed)
Thursday, June 12	Session Ends
Friday, June 13	Final Grades Due in Records Office 4:00 p.m.

FOUR-WEEK SESSION
(4-Days a Week Session)
No Friday Classes

Wednesday, June 11	Payment of Tuition Due
Monday, June 16	Session Begins
Tuesday, June 17	Late Registration Ends
Thursday, June 19	Last Day for Partial Refund
Monday, June 30	Last Day for Automatic Withdrawal/Passing
Wednesday, July 2	Last Day for Student Withdrawal
Thursday, July 10	Session Ends
Monday, July 14	Final Grades Due in Records Office 4:00 p.m.

EIGHT-WEEK SESSION
(4-Days a Week Session)
No Friday Classes

Wednesday, June 11	Payment of Tuition Due
Monday, June 16	Session Begins
Wednesday, June 18	Late Registration Ends
Monday, June 23	Last Day for Partial Refund
Tuesday, July 15	Last Day for Automatice Withdrawal/Passing
Wednesday, July 30	Last Day for Student Withdrawal
Wednesday, August 6	Session Ends
Thursday, August 7	Final Grades Due in Records Office 4:00 p.m.

New Student Registration Begins:
June 23

ILLINOIS VALLEY COMMUNITY COLLEGE

CALENDAR 1986-1987

FALL SEMESTER, 1986

Thursday, August 14	Division In-Service for Faculty
Friday, August 15	Faculty Fall Conference Day Orientation of New Faculty
Monday, August 18	Classes Begin
Friday, August 22	Late Registration Ends for Day Classes
Thursday, August 28	Late Registration Ends for Evening & Off-Campus Classes
Friday, August 29	Last Date for Partial Refund
Monday, September 1	Labor Day (College Closed)
Wednesday, October 15	Mid-Term
Thursday, Friday October 16 and 17	Mid-Semester Break for Faculty & Students
Friday, November 7	Last Date for Automatic Withdrawal/Passing
Tuesday, November 11	Veterans' Day (College Closed)
Wednesday (Noon), Thursday, Friday November 26, 27, 28	Thanksgiving Vacation (College Closed)
Monday, December 1	Classes Resume
Friday, December 5	Last Date for Student Withdrawal
Monday, Tuesday, Wednesday, Thursday December 15, 16, 17, 18	Semester Exams
Friday, December 19	Final Grades Due in Records Office 1:00 p.m.
Friday, December 19	Semester Ends
Friday, December 19 through, January 5	Faculty & Student Vacation
Wednesday through Friday, December 24, 25, 26 and Wednesday, December 31, and Thursday, January 1	Holidays for Staff (College Closed)

New Student
Registration Begins:
November 3

SPRING SEMESTER, 1987

Wednesday, January 7	In-Service for Faculty
Thursday, January 8	Classes Begin
Tuesday, January 13	Late Registration Ends for Day Classes
Tuesday, January 20	Late Registration Ends for Evening & Off-Campus Classes
Tuesday, January 20	Last Date for Partial Refund
Friday, February 13	Lincoln's Birthday (College Closed)
Friday, March 13	Mid-Term
Friday, March 13	Faculty In-Service Day
Monday through Friday, March 16-20	Spring Vacation for Faculty & Students
Monday, March 23	Classes Resume
Wednesday, April 1	Last Date for Automatic Withdrawal/Passing
Friday, April 17	Good Friday (College Closed)
Wednesday, April 29	Last Date for Student Withdrawal
Thursday, Friday, Monday, Tuesday May 7, 8, 11, 12	Semester Exams
Wednesday, May 13	Final Grades Due in Records Office 1:00 p.m.
Friday, May 15	Semester Ends
Friday, May 15	Commencement

PRE-SUMMER AND SUMMER SESSIONS, 1987

New Student Registration Begins:
April 20

PRE-SUMMER SESSION

Tuesday, May 19 . . . . . Last Day for Registration

Wednesday, May 20 . . . . . Pre-Summer Session Begins

Friday, May 22 . . . . . Last Day for Partial Refund

Friday, May 29 . . . . . Memorial Day (College Closed)

Thursday, June 11 . . . . . Session Ends

Friday, June 12 . . . . . Final Grades Due in Records Office 4:00 p.m.

FOUR-WEEK SESSION
(4-Days a Week Session)
No Friday Classes

Wednesday, June 10 . . . . . Payment of Tuition Due

Monday, June 15 . . . . . Session Begins

Tuesday, June 16 . . . . . Late Registration Ends

Thursday, June 18 . . . . . Last Day for Partial Refund

Monday, June 29 . . . . . Last Day for Automatic Withdrawal/Passing

Wednesday, July 1 . . . . . Last Day for Student Withdrawal

Thursday, July 9 . . . . . Session Ends

Monday, July 13 . . . . . Final Grades Due in Records Office 4:00 p.m.

EIGHT-WEEK SESSION
(4-Days a Week Session)
No Friday Classes

Wednesday, June 10 . . . . . Payment of Tuition Due

Monday, June 15 . . . . . Session Begins

Monday, June 17 . . . . . Late Registration Ends

Monday, June 22 . . . . . Last Day for Partial Refund

Tuesday, July 14 . . . . . Last Day for Automatice Withdrawal/Passing

Wednesday, July 29 . . . . . Last Day for Student Withdrawal

Wednesday, August 5 . . . . . Session Ends

Thursday, August 6 . . . . . Final Grades Due in Records Office 4:00 p.m.

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HISTORY OF THE COLLEGE

Illinois Valley Community College's $20 million campus, which began with the overwhelming approval of a bond referendum in 1967, was completed in 1980 following a 13-year period of growth and expansion in Oglesby, Illinois.

Phase III-B, a $1.58 million theatre/ lecture hall just east of the main complex, opened its doors in October, 1980, marking the completion of the community college campus situated atop a wooded bluff south of LaSalle overlooking the beautiful Illinois River. When in theatre form, the structure accommodates more than 600 persons for plays and productions, with the ability to convert to three 200-seat lecture halls for student instruction.

In September, 1979, Phase III-A construction was completed on IVCC's 29,500 square foot automotive/ agriculture facility on the interim campus. Students in both curriculums can pursue one and two-year degree programs, as well as transfer programs, surrounded by the most modern lab and instructional equipment, along with large hands-on lab areas for study on actual pieces of farm and automotive machinery.

Citizens of District 513 approved the $8.25 million referendum on October 21, 1967, slated toward the development of IVCC's campus. The district includes 21 high schools, and all or a part of eight counties in North Central Illinois. Although relatively new, IVCC shares the 56-year history of its parent institution, LaSalle-Peru-Oglesby Junior College which was formed in 1924.

In July, 1972, the college began to move much of its staff and equipment from temporary buildings in to the Phase I facilities.

The Phase I building program included a core administrative center, library (and now a federal depository), radio-TV studio, and two classroom segments with a learning-resource center in each one. The Phase II plan consisted of a gym, and two more classroom buildings completed in 1975. The interconnected classroom structures total more than 225,000 square feet of space, and form an enclosed courtyard.

Located to the south of the classroom buildings is the 28,000 square foot physical education center containing a gym, two multi-purpose education rooms, dressing areas, a training room, and a weight room. An eight-lane all weather track, tennis courts, and baseball diamond are also located on campus.

IVCC serves approximately 4,200 students each semester in a variety of programs on campus. Evening classes are offered in several high school and off-campus centers, while day and evening courses are presented at the nearby Sheridan Correctional Center. More than 4,500 persons are served each semester by IVCC's Office of Continuing Education which provides a myriad of business, industrial, and leisure-time courses.

EDUCATIONAL PHILOSOPHY

ILLINOIS VALLEY COMMUNITY COLLEGE IS A COMPREHENSIVE [illegible]IONAL INSTITUTION ESTABLISHED TO PROVIDE FOR ITS STUDENTS THE OPPORTUNITY TO LEARN AND TO DEVELOP THEIR ABILITIES, AND FOR THE COMMUNITY THE OPPORTUNITY TO SHARE AND TO PARTICIPATE IN CONTINUING EDUCATIONAL AND CULTURAL PROGRAMS. TO THIS END, ILLINOIS VALLEY COMMUNITY COLLEGE OFFERS CURRICULA DESIGNED TO STIMULATE INTELLECTUAL AND PHYSICAL GROWTH, TO FOSTER SOCIAL AND EMOTIONAL MATURITY, AND TO INCULCATE INTEGRITY.

IN ACCORD WITH THIS STATEMENT, ILLINOIS VALLEY COMMUNITY COLLEGE SETS FORTH THE FOLLOWING OBJECTIVES.

A. To provide curricula to meet the varied needs of the students and the community:

1. *PRE-BACCALAUREATE PROGRAMS IN PREPARATION FOR UPPER-DIVISION DEGREES CONFERRED BY UNIVERSITIES AND OTHER COLLEGES;*

2. *APPROPRIATE COURSE OFFERINGS FOR ONE AND TWO-YEAR GENERAL STUDIES PROGRAMS;*

3. *SEMI-PROFESSIONAL AND TECHNICAL PROGRAMS RELEVANT TO COMMUNITY GROWTHS AND NEEDS;*

4. *VOCATIONAL PROGRAMS DIRECTED TOWARD THE ACQUISITION OF NEW SKILLS OR THE FURTHERING OF PROFICIENCY IN SKILLS ALREADY LEARNED;*

5. *CULTURAL, INSTRUCTIONAL, AND RECREATIONAL PROGRAMS FOR PERSONAL DEVELOPMENT.*

B. To provide services and to sponsor activities pertinent to the scope and function of a college:

1. *GUIDANCE SERVICES FOR THE ASSISTANCE OF EACH STUDENT IN MEETING HIS INDIVIDUAL NEEDS;*

2. *CO-CURRICULAR ACTIVITIES DESIGNED TO PROMOTE OR ENCOURAGE CULTURAL IMPROVEMENTS, RESPONSIBILITIES OF CITIZENSHIP, AND PHYSICAL OR SOCIAL SKILLS;*

3. *COMMUNITY ACTIVITIES ASSOCIATED WITH THE COLLEGE AS AN EDUCATIONAL CENTER, SUCH AS FORUMS, LECTURE SERIES, ART EXHIBITS, SEMINARS, SHORT COURSES, AND SUMMER PROGRAMS.*

HOW TO UNDERSTAND COLLEGE CREDIT HOURS

What are college credit hours? This is a question often asked by many people prior to enrolling in college classes or certificate and degree programs.

College credit hours are earned by students when they spend hours learning a skill (such as welding), or an academic body of knowledge (such as political science or business law) or an avocational interest (such as photography).

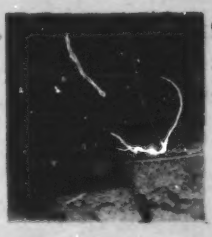
At IVCC credit hours are placed on each subject. The number of credit hours is determined by the number of lecture, laboratory, seminar, or field experience hours determined necessary for each course.

MANY COURSES AT IVCC RUN FOR 16 WEEKS

(Some run for 3 weeks, 4 weeks, and 8 weeks)

Example 1: In a 3-credit hour course at IVCC a student may be in class for three 50-minute periods a week for 16 weeks:

9 - 9:50 a.m.
Monday
(50 minutes)



9 - 9:50 a.m.
Wednesday
(50 minutes)

9 - 9:50 a.m.
Friday
(50 minutes)

----------OR----------

Example 2:

9:30 - 10:45 a.m.
on
Tuesday and Thursday
(75 minutes each day)

Example 3: In another 3-credit hour course, a student may be in a course for 3 hours at a time (150 minutes), once a week for 16 weeks:

7:00 p.m. to 9:30 p.m.
Monday Evenings

STUDENT SERVICES INFORMATION

STUDENT DEVELOPMENT PROGRAM

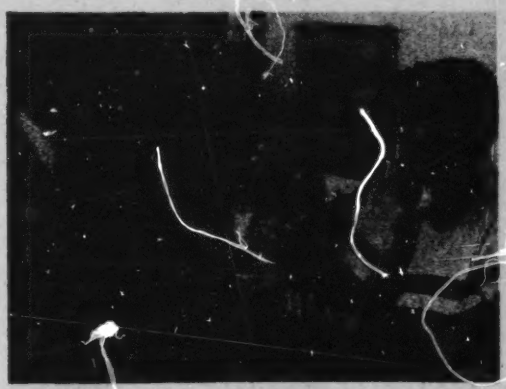
The college offers a comprehensive program designed to assist students in discovering, establishing, and attaining their educational, vocational, and personal goals. Counselors are available to all students. Through test results and interviews with counselors, students are assisted in determining their strengths and limitations, assessing their interests, and planning a systematic program of educational, social and personal development.

Orientation

A special orientation program is provided for entering freshmen and other new students to help acquaint them with the physical facilities and student services at IVCC, as well as future classmates. Academic programs and campus regulations are discussed during orientation, and college personnel are present to answer any questions which may arise. With the assistance of the counseling staff, student academic programs for the first semester are scheduled as an integral part of orientation.

Career-College Information Center

The Career-College Information Center is located in Room C-212. Students desiring information regarding most colleges and universities located throughout the United States will find many college catalogs arranged according to state in E-212. Many sources of information regarding over 1,000 different careers and occupations, are on file in the Career-College Information Center. All information is available to any student on a checkout basis. Many reference publications dealing with careers, college transfer information, professional school entrance requirements, listings of colleges providing programs under specific majors, vocational-technical training programs, and other items of college and career information are located in LRC-D or in the Jacobs Memorial Library, C-201. Students having questions or concerns regarding the career decision-making process should consult with a counselor. If deemed advisable, a counselor may suggest that the student take an interest or aptitude inventory for further assistance in the decision-making process.



Jim Stevenson (left), Counselor, is one of the IVCC counselors available days, evenings, and off-campus.

Counseling

Counseling services, including assistance with personal, education, or career concerns, are available to all IVCC students. When the college is in session, counselors are available from 8 a.m. to 4 p.m. on weekdays and, for the convenience of evening students, from 5:30 to 8:30 p.m., Monday through Thursday.

Academic Advising

Beginning with admission to the college and continuing each semester, students consult

counselors and faculty resource persons who assist them in establishing and pursuing educational and career goals and in planning course schedules for each academic term. Curriculum guides for programs offered by the college are available in LRC-D and these guides, used in combination with the current IVCC catalog, list requirements for specific programs and graduation from IVCC.

IVCC Academic Advising

Policy Statement

A. The functions of academic advising at IVCC include:

1. Providing students with current information on policies, procedures, and programs of IVCC and other universities as possible.

2. Assisting students in choosing educational and career objectives commensurate with their interests and abilities.

3. Assisting students in exploring the possible short and long range consequences of their choices; and

4. Making students aware of the wide range of services and educational opportunities that may be pertinent to their educational objectives.

This process involves a set of constructive and cooperative relationships between students and advisors.

B. Academic advising is based upon a complex of policies, procedures, publications, personnel, and services that are supervised through the Office of the Dean of Student Development who is responsible for:

1. Articulation on a course by course basis (as possible) with the universities which the majority of our students attend.
2. Review and evaluation of the academic advising program.
3. Development of appropriate procedures for the academic advising program.

C. It is the responsibility of each student to know and meet graduation and other requirements and to make every reasonable effort to obtain adequate academic advising. Frequent advisor contact will help to ensure the student has current academic information and is making adequate progress toward educational goals.

Bookstore

The college Bookstore is located in Room C-205, directly adjacent to the main lobby of the college. The Bookstore stocks textbooks and classroom supplies. They also stock general books, greeting cards, emblematic merchandise, and a complete line of school and office supplies.

New and used textbooks may be purchased. The Bookstore sponsors

a Buy-Back at the end of each semester, during final exams. The person selling the book back receives one-half of the list price of a new book, even if they purchased it as a used book.

Bookstore Hours:
Monday thru Friday 8:00am-4:00 pm
Monday thru Thursday 5:30pm-7:30 pm

Bookstore Hours:

Monday thru Friday: 8 a.m.- 4 p.m.
Monday thru Thursday: 6 - 7:30 p.m.

Day Care Center

IVCC operates a Day Care Center in the Automotive Building on the East campus on days when college classes are in session. Currently enrolled students with children ages 2-5 years may utilize this service at an hourly charge per child. The Center is open from 7:45 a.m. until 4:00 p.m.
No meals are provided at the Center, so parents are responsible for seeing that their children receive their normal meals. Persons with extenuating circumstances must contact the Day Care Coordinator regarding any special arrangements which must be made.

Students wishing to enroll children at the Day Care Center should contact the Center Coordinator at Building 10 when classes begin each semester. A short enrollment form must be completed, so please allow sufficient time for completion of this form. Questions regarding the Day Care Center should be directed to the Center Coordinator or by calling 815/224-2720.

Inclement Weather Policy

It is the policy of the college that classes will meet and the college will be open, regardless of the weather, on all days when the official calendar calls for classes.

The geographic size of the district makes possible the existence of varying weather conditions on any given day in different locations throughout the district. IVCC students will be expected to decide for themselves whether they should or should not attend classes during periods of inclement weather.

OTHER SERVICES FOR STUDENTS

Housing

The college has no dormitory or housing facilities. Students seeking housing closer to campus are advised to check the classified section of the local newspaper and to check with friends in the area. The office of the Dean of Student Development also collects information regarding off-campus housing. Housing agreements are to be arranged between the landlord and the student.

Events Calendar

The Events Calendar is published by the Office of Public Information Services and includes all scheduled campus events and activities. The Events Calendar is posted on all campus bulletin boards. Students should check the Events Calendar regularly to be informed of upcoming events and important dates related to the academic calendar.

Food Services

Food service is available each day that classes are in session. The college cafeteria is located on the lower level of Bldg. C and features [illegible]es and snacks as well as pl[illegible]e [illegible]ches. Food and beverages are to be consumed in the cafeteria area and are not to be carried to other parts of the building.

Insurance

The college does not offer a group health or health/accident insurance policy for students. Each student must secure that coverage for himself, if desired.

Intercollegiate Athletics

The college recognizes the value of athletic participation and, therefore, supports intercollegiate and intramural athletic programs for men and women.

Intercollegiate sports at IVCC include baseball, basketball, volleyball, softball, cross country, football, golf, tennis, and track and field. Students wishing to participate on college intercollegiate athletic teams should contact the Director of Athletics in Room G-211.

Learning Resources

Jacobs Library is located on the main floor of Bldg. C and provides a quiet atmosphere and comprehensive collection of reference materials for IVCC students. The library also is now a depository library receiving both federal and state publications for use by the residents of the 15th Congressional district and Community College District 513. Students are encouraged to become acquainted with the service offered by the library and to browse through the magazines, newspapers, periodicals, books and various standard reference volumes to become informed regarding available materials.

A library handbook is available which lists the hours of operation and complete information regarding use of the library. Any questions concerning the library, the depository, or reference materials should be directed to the library staff.
The Audio Visual Center, located in Room C-317, is equipped to produce transparencies, 8mm films, television programs and audio tapes, as well as signs and posters to publicize campus events and activities. Tapes, loops, filmstrips, slides and recordings are circulated to students through the library. Questions regarding audio visual equipment and facilities should be directed to the Audio Visual Center.

Records Office

The Student Records Office, Room C-207, has the responsibility of maintaining the permanent academic records of all students who attend IVCC. Requests to repeat a course or to have an official transcript sent to another institution must be submitted to the Records Office. The forms to be completed by students for these requests are available in the Records Office.

Parking

The college provides free parking for its students. Several parking lots are designated for students.

FINANCIAL AIDS

The Financial Aid Office of Illinois Valley Community College attempts to ensure that no student is denied access to the college due to lack of funds. To do this IVCC encourages all students to apply for several major sources of aid. These sources include Illinois State Scholarship, Pell Grant, College Work Study, Supplement Grant, and Illinois Guaranteed Loan.

All aid is based strictly on the financial information of the students and their families. Applications for aid should be filed as early as possible. Students can begin to apply in January for aid the following fall. Applications are available in the Student Development Office (C-213) and from the counselors of all the area high schools. Students applying for financial aid should use the ACT Family Financial Statement or the Applicaton for Federal Student Aid. Specific questions about aid can be made by contacting the Director of Financial Aid in Room C-215. The director also provides information concerning aid to those students who wish to transfer.

Students who have previously attended another college must submit a financial aid transcript from that school before they can receive financial aid. This is required even if the student did not receive assistance.

Illinois State Scholarship ISSC)

Any residents of Illinois may apply for this scholarship. Based only on family financial in information, it has helped more students than any other form of aid. Eligible students receive awards which usually cover all the tuition and fees at IVCC for two semesters.

Pell Grant

Pell Grant is the largest source of aid in the nation. Eligible students receive grants ranging from $200-$1,175 for two semesters of full time attendance at IVCC. This money is used for any education expense such as transportation, books and housing.

College Work Study

Work-study is a program designed to help students find part time employment on campus or at local non-profit agencies. If any student is considering working on campus they should contact the office of financial aids. It is recommended that students fill out the ACT Family Financial Statement when applying for this form of financial aid.

Supplemental Educational Opportunity Grant (SEOG)

Supplemental grant is additional gift assistance which is awarded to students with demonstrated financial aid.

Illinois Guaranteed Student Loan (IGLP)

This is the only educational loan available to IVCC students. IGLP is the least desirable form of assistance and should be considered only after all other sources of aid have been tried. The loan is basically between the student and the bank or savings and loan. Initial application should be made with the lending institutions. Repayment of principle and interest generally begins six months after the students leaves school. The interest rate is currently 8%.

Illinois Veteran's Scholarship

The State of Illinois will pay all tuition and activity fees for most veterans attending IVCC, the requirements are:

1. Veteran was a resident of Illinois before entering service.
2. Served at least one year of active duty (exceptions made for early medical discharge).
3. Obtained a general or honorable discharge.
4. Must have served honorably in the U.S. Armed Forces (excluding the Student Army Training Corps) on or before May 7, 1985, unless the student had previously used the Veteran's Scholarship.

To apply for the scholarship submit a copy of your discharge papers (DD-214) to your regional veteran's office.

Local Scholarships

A limited number of scholarships are offered to students each year. Most scholarships are offered through the high schools, therefore students should check with their counselors first.

Various scholarships are also offered directly through the college from various organizations such as the IVCC Foundation, Kiwanis Club, Ottawa Business and Professional Women's Club, LaSalle Rotary, Illinois Health Improvement Association, and many more. The college will announce availability of all scholarships through the student newspaper.

Satisfactory Academic Progress

Students receiving federal financial aid funds must remain in good standing and must show satisfactory progress toward their certificate or degree. (Title 45. Ch. I, Part 144, Sec. 144-2-20, Fed. Regs.)
For purposes of implementing this policy, the following criteria will be used:

I. Where two or more courses are taken and the student fails/withdraws from all, the student will be determined to have made unsatisfactory progress with the office of financial aid.

II. Failure to successfully complete more than 50% of the courses or semester hours in which the student enrolls will be determined to be unsatisfactory progress with the office of financial aid and may result in the loss of further financial aid benefits.

III. If the student's grades do not meet the standards of academic progress, the semester the student is placed on academic probation, the student will not receive financial aid the following semester.

IV. Financial aid recipients must remain in good standing and must show satisfactory progress toward their certificate or degree in order to be considered making satisfactory progress.

Academic Progress

Students receiving federal or state financial aid funds must remain in good standing and must show satisfactory progress toward their certificate or degree (Title 45. Ch. I, Part 144, Sec. 114.2-20, Fed. Regs.). For purposes of implementing this policy, the following criteria will be used:

1. Semester Requirement - Each semester a student must complete 50% of the hours he/she has enrolled for.
2. Grade Point Average Requirement- Financial aid recipients must maintain the following grade point averages, as listed under schlastic requirements in the IVCC catalog in order to be considered making satisfactory progress.

G.P.A.	.00-1.49	1.50-1.99	2.00-4.00	Classification
H.A. 9-29	Prob.	G.S.	G.S.	Freshman
H.A.30-44	Prob.	Prob.	G.S.	Sophomore
H.A.45+	Drop	Prob.	G.S.	Sophomore

Abbreviations: H.A.-Hours Attempted; Prob.-Probation; G.S.-Good Standing; G.P.A.-Grade Point Average; Drop-Excluded (Dropped).

3. Maximum Time Frame Requirement- Students may receive financial aid until they have accumulated or attempted 90 semester hours of credit from Illinois Valley Community College. This policy will consider all enrollments at Illinois Valley Community College whether or not financial aid was received.
4. Rate of Completion Requirement- Students must progress toward their educational goal at a minimum rate defined as follows:

Total Hours Attempted	Cumulative Percent Completion Required
9 - 45	50%
46 - and above	60%

NOTE: Hours attempted is defined as the total credit hours you are enrolled in as of the last date of tuition refund.

Financial aid recipients' satisfactory progress is evaluated after the completion of each semester of the academic year. Evaluations will be based on courses attempted or completed at Illinois Valley Community College and any course-work transferred from another college and accepted at IVCC. Should the evaluations indicate the terms of the policy have not been met, the student will be denied future financial aid. Earned A, B, C, D, or P grades are considered completed grades. Incompletes, withdrawals, E's, F's, WF's, and WP's are not considered complete grades but are evaluated in the total hours attempted. Audits, proficiency tests, and non-credit courses are not included in the total number of credit hours attempted, therefore not considered toward credit hour completion. For a student to successfully pursue his education remedial classes may be required to update preliminary skills. If these remedial skills are needed, a student's total hours of course work may be more than the 65 needed for graduation. Extenuating circumstances that may have caused nonprogression, if fully documented, can be reviewed by the Director of Financial Aid for possible waiver of financial aid denial.

In reviewing the satisfactory academic progress of a student receiving financial aid, the following considerations will be made:

(a) The total GPA.
(b) The previous semester's GPA. This can be a considering factor in the initial disbursement of aid or the continuing of aid. A student can show by one semester of improved grades that he/she is able to now complete college course work. This issuing or continuing of financial aid is at the discretion of the financial aid director.

5. Students not meeting the academic standards will be placed on warning status with the financial aid office. If the following semester they can not maintain academic standard they will be placed on financial aid probation with IVCC's Office of Financial Aid.

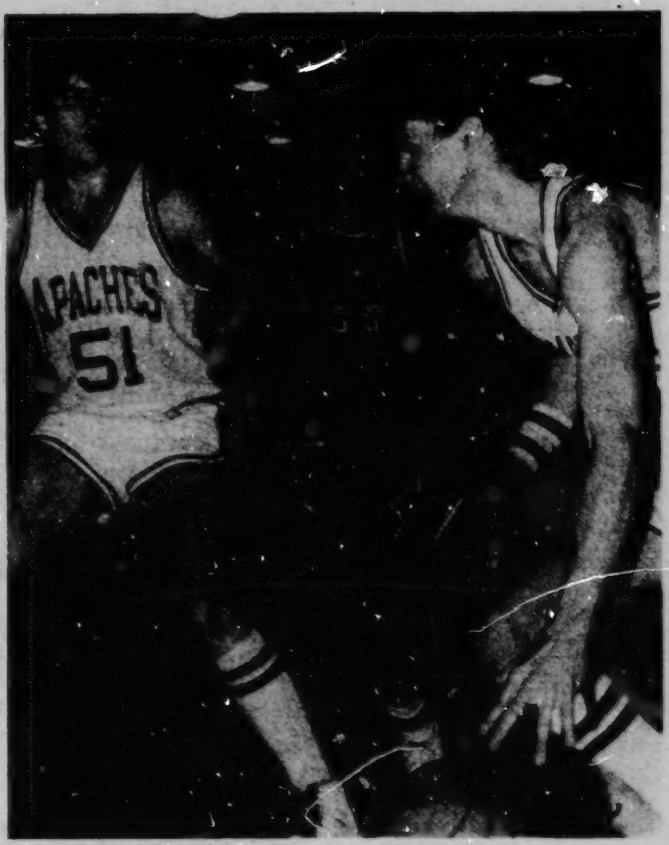
6. Reinstatement - The policy does not preclude a student from enrolling in subsequent semesters and reinstated by the Financial Aid Office when a student satisfies requirement I, II, or IV above that caused financial aid.

Scholarship Program Application

For Members of the Illinois National Guard or Illinois Naval Militia

Members of the Illinois National Guard or Illinois Naval Militia who have served at least one year and who possess all necessary entrance requirements may make application for a scholarship to be used at an Illinois state controlled university or public community college.

FOR MORE INFORMATION CONTACT THE OFFICE OF FINANCIAL AIDS.



Men's basketball at IVCC — David Moran, 51, Ottawa, was voted the most valuable player in the North Central Community College Conference in 1985.

The academic honors recognized at IVCC include the following:

Dean's List

The Honors List will include students earning a grade point of 3.25 to 4.00 in 12 or more semester hours. The 12 semester hours exclude non-credit courses, courses taken on pass/fail, and courses in College Preparedness Program.

Honors at Graduation

Honors at commencement will be as follows:
Cum Laude - g.p.a. of 3.25 to 3.74
Magna Cum Laude - g.p.a. of 3.75 and above

Honors

Thomas J. McCormack Scholars

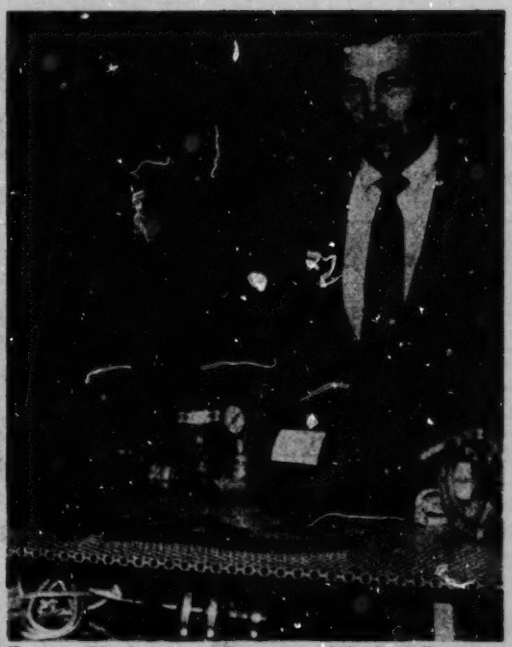
Students earning a minimum grade point average of 3.75 in 14 or more semester hours each of the first three semesters will be designated as Thomas J. McCormack Scholars at the annual Scholastic Honors Banquet held in March. Mr. McCormack was principal of La Salle-Peru Township High School from 1903-1932 and the first director of L-P-O Junior College which was housed at the high school for many years.

F. W. Matthiessen Award

This award is presented during commencement to the student who has not only attained the highest grades but who has also distinguished himself/herself in service to the college and to the local community. This distinguished award is given to commemorate the civic leadership, community service and philanthropic spirit of Mr. Matthiessen, one of the area's most prominent industrialists and philanthropists.

CONTINUING EDUCATION

The Office of Continuing Education is the outreach office for college activities. Non-credit instruction, adult education, gifted student, special training, and aging programs are administered by the office. Off-campus college credit courses and the evening college are supervised in cooperation with the Office of Academic Administration. Enrichment and vocational non-credit mini-courses are developed. Basic education is provided adults who have not obtained a high school diploma. A Summer Institute for Gifted Students is offered. Specialized training is developed for business and industry. Transportation, meals, and information services are provided seniors in the Neighborly Older American program. Every effort is made to help the community to respond to its economic development needs and extend educational services throughout the college area.



Eugene Blankemeyer, Director of Special Training, designs specific training programs for area businesses and industries.

NON-CREDIT MINI-COURSES

Mini-courses are developed each semester to satisfy expressed interests in a wide variety of enrichment and vocational skill areas of content. They are offered evenings on-campus and at a half dozen or more off-campus sites. A person may enter a calligraphy course at Streator, a history program on-campus, a horse handling course at Westbrook Stables, an accounting course in Ottawa, a microwave course in Seneca, a word processing course at Tiskilwa, an adult recreation program at Mendota, or a delicious desserts course at Princeton. Persons are encouraged to contact the Office of Continuing Education with suggestions for new programs they might like taught in their community.

The non-credit mini-course program is designed to quickly respond to needs for new areas of instruction. Faculty are drawn from the community, often from a pool of practicing specialists in the field to be studied. The program is practical and each course must on the average be financially self-supporting.

ADULT EDUCATION

Adults who have received less than a high school diploma in their formal education may find renewed educational opportunities in this program. English as a Second Language (ESL), Adult Basic Education (ABE), General Educational Development (GED), and Life Skills Training (LST) make up the Adult Education program. All instruction and on-site study materials are provided at no participant cost. Evening classroom courses in GED are provided at Streator, Ottawa, Mendota, and Princeton. Evening ESL classes are provided in Ottawa, Princeton, and Mendota as well as at an on-campus location. An ABE class is provided at Streator and individualized ABE instruction is provided in the Adult Learning Center Located on the college campus. Individualized instruction is also provided in GED and groups of students may enter LST instruction in the Adult Learning Center during day and evening hours.

ESL - English as a Second Language provides programmed instruction in the basic language skills of speaking, listening, reading, and writing English to students with beginning, intermediate, or advanced English proficiency. Students in ESL may also work in the ABE or GED programs as they progress through higher levels of pronunciation, composition, vocabulary, and comprehension in English.

GED - General Educational Development provides concentrated instruction directed toward the skills and information needed to secure the GED certificate which is equivalent to a high school diploma for adults age 18 and over whose high school class has graduated.

LST - Life Skills Training provides adults job seeking skills, constitution, and citizenship training in a group learning environment.

ALC - The Adult Learning Center provides individualized instruction in ABE and GED areas of content. Group instruction is provided in LST areas of study. Literacy training is provided on an individualized basis. Individualized instruction is organized under a Coordinator and provided by a team of lead teachers, recordkeepers, teacher aids, and volunteers. A Voluntarism in Teaching Specialist and an Information and Referral Specialist support the program. A separate set of instructors provide LST group instruction.

GED CERTIFICATE TESTING CENTER- IVCC serves LaSalle and Putnam Counties and most other parts of counties found in the college area as an accredited GED Testing Center. Bureau County students are tested at the office of the Bureau County Regional Superintendent. The test is given in both English and Spanish in five content areas: Writing Skills, Social Science, Science, Reading Skills, and Mathematics. Passing a test on the Illinois and U.S. Constitution is also required.

GED GRADUATION- An annual ceremony for IVCC students who have completed their GED course of study and have received the GED during the previous year are honored for unique achievement in attaining a high school certificate. Scheduled in late spring, the graduation serves as a starting point for future educational involvement.

GIFTED STUDENTS

A Summer Institute for Gifted Students is held during the June-July time period. Science, mathematics, and computer courses provide a core for the program. Students may be admitted through evidence of high aptitude, strong academic performance, and recommendations from their school officials.

Illinois State University supports this program effort by providing College for Youth courses to K-12 students not served by the Summer Institute program.

A series of additional enrichment courses are provided to satisfy educational needs of athletic program and computer interest groups of youth.

SPECIAL TRAINING

To fulfill its commitment to provide educational services which assist in the growth and development of the community, the Office of Continuing Education works with college faculty, business, industry, government, and allied health organizations to implement two major services--specialized training and advisory or problem solving services.

Specialized Training - To meet the continuous need for more and higher level knowledge of increasingly complex technology, special training programs are developed and conducted for all segments of the business and service community. In consultation with individual or groups of companies, training needs for the upgrading of knowledge and skills are identified. Specific training plans are then tailored to meet those unique requirements and are then conducted within the requesting organization's facilities or on-campus to obtain the best possible results. No training requirement is beyond consideration, as experts in a wide range of subject matter can be and are recruited from college faculty, community, state, and natural organizations to provide needed training.

These programs, initially developed for specific companies, are periodically offered to all companies through distribution of a catalogue of special training programs in such diverse subjects as Nursing Ethics, Business Planning, Marketing and Sales, Micro-computers for Small Business, Basic Machinist, Electronics Trouble-shooting, Hydraulics, Maintenance Mechanics, Numerical Control Machining and Programming, Supervision, Automation, Project Management, and many others.

Through grants from the state for economic development, many of these programs are conducted at a minimal cost to participants.

Advisory Service - In the development of the large number and variety of special training programs the talents of many people from the community and state have been utilized. It is logical that this wide range of talent and expertise should be organized into a program to provide advice and problem solving for the benefit of companies within our community. Through this program, the Office of Continuing Education can provide assistance to analyze management and operating problems associated with the goals, objectives, policies, strategies, administration, organization and the principal functional or operating area of the various industrial companies within the community; recommendations of practical solution; and help to implement changes when necessary.

PROJECT NOA (Neighborly Older Americans)

Project Neighborly Older Americans is an extensive program serving older Americans in Bureau, LaSalle, and Putnam counties. Older Americans in the IVCC district can have many of their educational, nutritional, and social needs met through the project with sites at 17 locations, including a Senior Center on the IVCC campus.

Services available through Project NOA include:

Seventeen Nutrition Sites - offer a delicious well balanced meal containing at least 1/3 of the daily adult nutritional requirement. Meals are served Monday-Friday between 11:30 a.m. and 12:00 noon. Recreation and nutrition programs are also offered at these sites.

The new Illinois Valley Senior Center - this multi-purpose Senior Center serves as a community focal point for older Americans; a place where individuals and groups come together for services and activities which will support their independence and encourage their involvement in and with the community. A variety of opportunities are available: education, creative art, leadership development, recreation, advocacy,

health and fitness, intergenerational programs, and other special interest programs. Other services available: congregate and home bound meals, transportation, information and referral on aging and related services. Square dancing, kitchen bands, bingo, and card playing are just some of the activities waiting for you!

Transportation is provided - rides to the nutrition sites, the IVCC Senior Center, special appointments, and for NOA's shopping assistance trips--please call reservations 24 hours in advance.

Information - on Social Security, tax rebates, circuit breakers, and other matters concerning Seniors is provided and explained.

Home Bound Meals - to those who can not get out are available to those who qualify.

Outreach/Counseling - to access needs and help Seniors find ways to meet these needs can be arranged.

Volunteer Opportunities - NOA needs volunteers! Many positions are available. One or two hours a day would help serve the Seniors in your area. Discover your interests, develop your talents, and strengthen your skills! Old age is a triumph! Share your talents--take this challenge and join us!

These community resources are open to all persons in the IVCC district who are age sixty and over and their younger spouse. Please join us, its for you!

Project NOA is sponsored by Illinois Valley Community College, Department of Continuing Education and Community Services, Western Illinois Area Agency on Aging, and the Illinois Department on Aging.

Jill Rauh is Director of Project Neighborly Older Americans (NOA).

STUDENT STATUS INFORMATION

CLASSIFICATION OF STUDENTS

Freshman

A student with fewer than 30 semester hours of college credit is given freshman status.

Sophomore

A student who has completed a minimum of 30 semester hours of credit will be given a sophomore status.

GRADING SYSTEM

A - Excellent - 4 grade points per semester hour.
B - Good - 3 grade points per semester hour.
C - Average - 2 grade points per semester hour.
D - Lowest passing grade - 1 grade point per semester hour.
F - Failure - 0 grade points per semester hour.
P - Passing - not included in computing grade point average.
WP - Withdrawn Passing - not included in computing grade point average.
WF - Withdrawn Failing - included in computing grade point average.
INC - Incomplete - not included in computing grade point average.

PASS/FAIL GRADING

Students enrolling in courses designated as continuing education offerings (courses having a middle digit of "1") may elect a pass/fail option. Students electing the pass/fail option must declare their intent at the time of registration. No more than twelve semester hours earned in pass/fail courses are applicable to a certificate or degree offered by the college.

GRADE OF "INCOMPLETE"

"Incomplete" is a temporary grade assigned when illness, unavoidable absence, or other reasons satisfactory to the instructor prevent completion of the course requirements by the end of the semester. A grade of "INC" must be removed as designated by the instructor, but not later than the last class day of the semester following the issuance of the incomplete.

If the incomplete is not made up within the allotted time, the student must repeat the course to earn credit for it.

Veterans must make up incomplete grades promptly to insure continued receipt of G.I. Bill benefits. Questions should be directed to the Student Records Office.

Any student enrolled in an open entry/open exit course may be given a "W" or "WF" at anytime throughout his/her semester.

AUDITING A CLASS

Students may enroll to audit classes after late registration is completed, subject to maximum class size limitations. No change from audit status to credit status, or vice versa, is permitted. Audit students pay the regular tuition rate.

ATTENDANCE/STUDENT PROGRESS

Students are expected to attend all classes regularly. If absence from class is unavoidable, it is the student's responsibility to explain the absence to his instructor(s) and arrange to complete any work missed.

If an instructor feels the number of accumulated absences is interferring with the student's progress and ability to successfully complete the course, the student may be dropped from the course without notice.

In open entry/open exit courses taught in a non-traditional manner, steady progress toward completion of course objectives is required of all students. Students not making normal progress in fulfilling course objectives may be dropped from the course without notice.

WITHDRAWAL FROM CLASSES

To withdraw from a class while continuing to carry other courses, a student must initiate a withdrawal request with the instructor whose class he/she wishes to drop. The instructor will complete a withdrawal form and submit it to the Student Records Office for processing. The student's record will not be changed until the signed, validated withdrawal form is received by the Records Office.

Approved official withdrawals through Friday of the twelfth week of the regular semester (Friday, the fifth week of the Summer session) will be given the grade of "WP".

No withdrawals will be permitted beyond Friday of the 16th week of the regular semester (or Friday of the 6th week of the Summer session).

Any student who stops attending classes without officially withdrawing may receive the grade of "F" for the course(s).

An "incomplete" may be changed to a "W" or "WF" by the instructor for any student in an open entry/open exit course, if satisfactory progress toward completion of the course is not made within a reasonable amount of time.

WITHDRAWAL FROM THE COLLEGE

Students desiring to withdraw completely from the college (drop all classes) must initiate this request with the Dean of Student Development, Room C-218.

TRANSCRIPTS

Transcripts will be released only upon written request by the student. Each student is entitled to one transcript free of charge. A fee of $2 will be charged for each additional transcript. Transcript request forms may be obtained in the Records Office.

SCHOLASTIC REQUIREMENTS

The scholastic requirements of the college are detailed in the chart below. To remain in "good standing", a student must achieve the minimum cumulative grade point average (G.P.A.) stated in the chart for the number of hours attempted in his declared program. Only students who have earned a cumulative G.P.A. of 2.0 (C) or better will be recommended for transfer to other colleges and universities.

All students will be subject to the same scholastic requirements. Academic probation or dismissal standards will not apply until a student has attempted a total of at least nine (9) semester credits.

TYPE OF DEGREE	TOTAL CREDIT HRS. ATTEMPTED	ACADEMIC PROBATION
A.A.,A.S. A.A.S.,A.L.S.	9 - 29	0.00-1.49
LPN & DA Certificates	over 29	0.00-1.99
All other students	9 - 25	0.00-1.24
	over 29	0.00-1.49

TYPE OF DEGREE	ACADEMIC DISMISSAL (after 1 semester on probation)	GOOD STANDING
A.A.,A.S. A.A.S.,A.L.S.	0.00-0.99	1.50 or more
LPN & DA Certificates	0.00-1.24	2.00 or more
All other students	0.00-0.99	1.25 or more
	0.00-1.24	1.50 or more

ACADEMIC PROBATION

A student on probation may not enroll for more than fifteen (15) credit hours.

A student on academic probation for three (3) consecutive semesters will be subject to academic dismissal. A student on academic probation may be subject to academic dismissal if the cumulative grade point average is not raised in subsequent semesters.

ACADEMIC DISMISSAL

A student will not be placed on academic dismissal status without first having been on academic probation.

A student on academic dismissal may register for up to six (6) hours in session in an attempt to improve his grade point average. A student who is academically dismissed may, after one regular semester, petition to the Dean of Student Development for readmission.

REQUIREMENTS FOR GRADUATION

To qualify for any of the associate degrees conferred by the college, a student must complete the specific requirements of the degree and the following requirements which apply to all associate degrees:

1. Successful completion of a minimum of sixty-four (64) semester hours of credit.
2. Of the minimum of 64 semester hours of credit required for the Associate in Arts and Associate in Science Degrees, sixty (60) semester hours must be earned in courses having a center digit of "0".
3. Completion of either Political Science 100, or History 200, or passage of the Constitution examination required by law, or certified by high school transcripts.
4. Completion at Illinois Valley Community College of at least one-fourth of the semester hours required for graduation. Only courses identified as freshman-sophomore level courses at the institution where taken will be accepted at IVCC as credits toward an Associate Degree.
5. Attendance at Illinois Valley Community College during the semester in which graduation requirements are completed.
6. Successful completion of all required courses for the specific Associate Degree desired and required minimum cumulative grade point average.
7. Credits earned in Adult Driver's Training and the General Education (G.E.D.) courses are not applicable to the Certificate in General Studies or the Associate Degrees. Credits earned in College Preparedness Program offerings (any course number below 100) are applicable only to the Certificate in General Studies.
8. Filing an intent to graduate and paying diploma/certificate fee.

The determination for each student of satisfactory completion of degree requirements for graduation will be made using the requirements stated in the catalog in effect at the time of graduation.

Insofar as it is possible, students making normal progress toward satisfactory completion of their degree requirements and who have remained in continuous enrollment, may elect to be evaluated by the requirements stated in the catalog in effect at the time of their entry to IVCC. Normal progress is defined as enrolling for at least the minimum full-time credit load of 12 hours.

Intent to graduate forms must be filed during the semester in which graduation requirements will be fulfilled. The deadline for filing the intent to graduate will be publicized in the Apache. The diploma/certificate fee must be paid at the time the graduation application is filed.

Cap and gown measurement dates will be announced between March 15 and April 15 for students desiring to participate in spring commencement exercises. Students wishing to be measured for cap and gown should contact the Bookstore for measurement and the exact deadline for cap and gown orders.

Honors at Graduation

Honors at commencement will be as follows:

Cum Laude - g.p.a. of 3.25 to 3.74
Magna Cum Laude - g.p.a. of 3.75 and above
Summa Cum Laude - Highest rank in scholarship above 3.75. Recognition will be given to students performing superior academic work in certificate programs (24 semester hours minimum) by listing in the commencement program the names of students earning a minimum of 3.75 g.p.a.

A minimum of 32 semester hours must be completed in an Associate degree at IVCC after transfer or change of degree intent to be eligible for honors at commencement.

GRADE EXCLUSION POLICY

The purpose of the grade exclusion policy is to provide the mature students an opportunity to achieve his/her educational objective without the demotivating effects of previously earned failing grades. To be eligible for consideration under this policy, a student must meet the following criteria:

1. He/she can not have attended any post-secondary educational institution for two consecutive semesters. (Summer sessions are not counted as semesters for this policy, but three consecutive academic quarters are considered the equivalent of two semesters.)
2. Upon returning to IVCC after the two consecutive semester out-of-school period, he/she must complete a minimum of 12 semester hours with a grade point average of 2.00 or better.
3. Upon satisfying criterion (2), the student must apply to the Director of Admissions and Records for implementation of the grade exclusion policy.

Explanatory Note: Only Failing ("F" or "WF") grades will be excluded from computation of the cumulative grade point average under this policy. If the student wishes to repeat some courses in which filing grades were received, he/she may utilize the college repeat policy for those courses by completing the appropriate form in the Student Records Office.

Students planning to transfer to another institution are cautioned that the receiving college may use all grades earned in repeated or excluded courses for computation of grade point average for admission or other purposes.

HONORS

Dean's List

The Honors List will include students earning a grade point of 3.25 to 4.00 in 12 or more semester hours. The 12 semester hours exclude non-credit courses, courses taken on pass/fail, and courses in the College Preparedness Program.

Degree of Certificate Classification

Every student desiring to receive a degree or certificate from IVCC must be classified as an unconditionally admitted student and be officially classified in the proper degree or certificate program. Students planning to complete graduation requirements should check during registration for their last semester of classes to insure the proper degree of certificate classification.

Degree or certificate classifications may be changed only at the time of registration.

Official Change of Degree or Certificate Objective

If students wish to change their degree or certificate objective, it is their responsibility to complete the Curriculum Change form in the Student Records Office. The date the Curriculum Change form is received in the Records Office will serve as the date of the official change to a new degree or certificate objective.

Applicable courses taken at IVCC will then be applied to the requirements of the new objective. Those courses will be listed on the IVCC transcript under the heading, "Changed to _____ Degree (or certificate)" followed by "Accepted from previous work: _____".

The grades for such previous course work will be included in the calculation of the g.p.a. for graduation if fifty percent or more of the credits required for the degree or certificate are from courses taken prior to the change in objective. If fifty percent or more of the credits required for the degree or certificate are earned after the change in objective, only grades used in calculation after the change in objective will be used in calculation of the cumulative g.p.a.

A change in degree objective is defined as:

1. A change from either the A.A. or A.S. degree to an A.A.S. degree or a certificate program;
2. A change from the A.A.S. or certificate program to a different A.A.S. or certificate program;
3. A change from A.A.S. or certificate program to an A.A. or A.S. degree; or
4. A change from or to an A.L.S. degree.

A change from an A.A. degree to an A.S. degree or vice versa is not defined as a change in degree objective.

OTHER EDUCATIONAL PROGRAMS

Associate in Liberal Studies

The Associate in Liberal Studies degree shall be conferred on those students who complete the basic requirements for all degrees and who complete an approved program of Liberal Studies with a cumulative grade point of 2.0. This program is designed for individuals who wish to continue their personal development through two years of post-high school education but are not interested in transferring toward a baccalaureate degree.

Certificates

A Certificate will be awarded to students who complete an approved program of general studies or continued education with a cumulative grade point average of 2.0. The Certificate shall bear the name of the program completed.

RESIDENCY (Definition)

30 DAY RESIDENCY
Qualifies you for In-District
$13 per Credit Hour Tuition*

Students should be able to provide one or more of the following:

1. *Voter registration in District 513.*
2. *Evidence of tax, utility, or rent receipts in District 513.*
3. *Driver's license and/or vehicle registration showing an address in District 513.*
4. *Full or part-time employment in District 513.*
5. *Other documents which can help verify residency in District 513.*

Newcomers to the Area - Welcome!

A student who resides with his parents or guardian in Community College District 513 is a resident student.

An emancipated student who is completely self-supporting and who has resided in Community College District 513 for at least 30 days prior to his registration at Illinois Valley Community College shall be considered a resident of the District.

*Subject to change.

A. REPEATING A CLASS

Students may repeat courses in which D's, F's, and WF's have been received. The second grade received will be used in computing the cumulative grade point average. However, all grades received will be recorded on the permanent record, and other institutions may include both grades in evaluating the student record.

A course may be repeated only once for the purpose of raising the grade for the course and the cumulative g.p.a. After once repeating a course, a student wishing to enroll again for the same course may only do so as a non-credit student.

A student wishing to repeat a course must complete the appropriate form in the Student Records Office.

B. PROFICIENCY EXAMINATION POLICY

A student may petition to take a proficiency examination in certain courses. The examination may be taken after approval by the appropriate Division Chairperson concerned, and is open to those students who meet the criteria established by the faculty responsible for a given course or curriculum. Proficiency may be by written and performance examinations as determined by the respective division.

Fee:

A non-refundable proficiency fee of $10 is payable at the time the student makes application for a proficiency examination. If the student passes the exam the student can then pay the regular tuition for the course and receive credit for the course.

Credit:

Credit may be granted for successfully passing a proficiency

examination. A maximum of one-fourth of the semester hours required to complete a certificate or a degree may be earned through proficiency examinations.

Grading:

No grade is given for proficiency examinations. A "pass" will be recorded if the examination performance is satisfactory. No official record is made of failures. The division in which the course is taught will place on file the standards that must be attained to pass the examination.

C. C.L.E.P. CREDIT

(College Level Examination Program)

IVCC accepts C.L.E.P. general and some subject examinations as follows:

1. General Examinations - 3 credits for each exam: mathematics, natural science and social science- history if a minimum acceptable score to the college is achieved (contact Student Development Office).
2. Additional credits may be earned through certain C.L.E.P. subject examinations.
3. No C.L.E.P. exam, general or subject, will satisfy the lab requirement in the mathematics-science area for the general studies requirements for the college's A.A. or A.S. degree.
4. A maximum of one-fourth of degee or certificate credits can be earned through C.L.E.P. exams.
5. No grades are recorded; "PASS" will appear on transcript.

D. TRANSFER CREDIT

(From Other Accredited Colleges)

1. Have transcript of credit earned at other colleges sent directly to IVCC Admissions Office - Official Transcripts Only.
2. Credit to be accepted at IVCC must have at least a "D" to be accepted. A "D" course may need to be repeated in certain IVCC programs.
3. G.P.A. (Grade Point Averge) will not be transferred or computed into IVCC g.p.a. unless credits equal 50% or more of the credits on an IVCC degree or certificate.

E. MILITARY SERVICE CREDIT

Veterans: Options open to veterans in evaluating prior military experiences:

1. Up to four hours of physical education and two hours in health if honorably discharged and with more than 12 months of active military services.
2. Elective credit - based upon American Council of Education's "Guide to the Evaluation of Education Experiences in the Armed Forces", an evaluation of completed military training programs: up to six credit hours. Documentation necessary.
3. Major field of study credit - upon request an evaluation of directly related military training will be made using the same source as in No. 2 above. Documentation necessary.

U.S.A.F.I. Veterans may request advanced standing for college level USAFI correspondence study (an official USAFI transcript is necessary).

Cooperative Army and Navy Programs: IVCC cooperates with the U.S. Navy in the "Direct Procurement Enlistment Program" and IVCC cooperates with the U.S. Army in the "Stripes for Skills" and "Project Ahead" programs.

Details can be obtained through Navy and Army recruiters.

TUITION AND FEES*

A. Tuition

1. Students shall pay $13 per semester hour tuition if they are residents of District 513 (see preceding page).

2. Foreign nationals, who are live-in guests of a sponsor who himself is a legal resident of Community College District 513, shall be charged only the in-district tuition and fees as pertain to credit courses in which they register at IVCC.

3. Legal residents of Community College District 513 who are 65 years of age or older, shall be charged the reduced fee of one dollar ($1.00) per credit hour for each credit course in which they register at IVCC.

B. Extra Charge of Non-Resident Students:

(See Residency Definition)

Students who are not residents of Community College District 513 shall pay an extra charge equal to the per capita cost per semester hour less tuition and state apportionment. Students may require their local high school district to pay this extra charge if they apply prior to July 1 preceding the opening of school and provided they do not live in another community college district. Out-of-district high schools will be billed after the midterm of a semester for their students on a chargeback who were officially enrolled at IVCC through the 10th day of the semester.

C. Fees:*

1. A diploma/certificate fee of $10 shall be paid by all students qualified for graduation.

2. A student activity fee is payable at the beginning of each semester by all students enrolled, at the rate of $1 per credit hour up to a maximum of $15.

3. Course supply fees will be charged.

4. An add fee (new course or section change) of $5.00 (for each course added or section changed) applies to all student-initiated requests to (a) add a new course, or (b) change a section after the semester has begun. An exception will be for evening and extension classes.

D. Fee Payment

Tuition and fees are due and payable at the time of registration for each semester. Students are not permitted to attend classes until their bills are paid.

Students who have not paid their tuition and/or fees, or who have not been issued tuition and/or fee deferments, will be dropped from their classes for non-payment on the day before the first day of classes each term. Students with deferments for tuition and/or fees must pay their bills in full by the week prior to midterm or they will be dropped from their classes. Exceptions must be approved by the Dean of Student Development.

E. Refund of Tuition and Fees

Refund of tuition and fees will be made on the following basis:

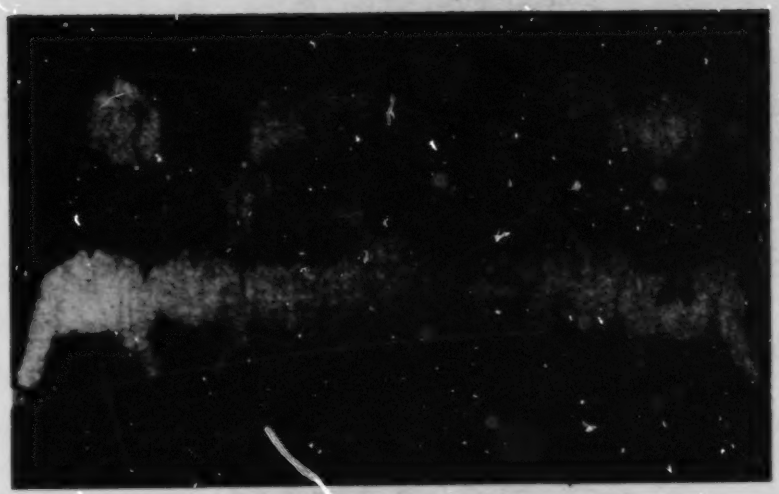
1. If a student withdraws officially from the college on or before the tenth day of the fall or spring semester or the fifth day of the eight week summer session, one-half of all tuition and fees will be refunded.

**Tuition and fees are subject to change by the Board of Trustees (District 513) action.*

2. Official withdrawal from the college after registration and payment of fees, but before the beginning of classes, will entitle the student to a refund of all tuition and fees. When a class is cancelled by the college, a full refund will be given.

3. Out-of-district high schools will be billed after the midterm of a semester for their students on chargeback who were officially enrolled at IVCC through the 10th day of the semester.

Gerald Olson, C.P.A., accounting instructor and sponsor of the IVCC Phi Theta Kappa chapter of the National Junior College Scholastic Fraternity (left). Mr. Olson is a 1985 Merit Recognition from the Board of Trustees.



The IVCC "Swing Choir" under the direction of Joan McGuire (back row, second from left).

STUDENT ACTIVITIES AND ORGANIZATIONS

Opportunities for the development of leadership, social and interpersonal relationships, skills and character are offered through participation in recognized campus organizations. Included among these are professional and honorary societies related to the academic areas of the college, departmental organizations, service and social organizations and recreational groups. Each organization, in fulfilling its obligation as a part of the college, has a faculty member or administrator as an advisor.

All social activities planned by the student clubs are held under the supervision of the faculty or administration advisor.

Dr. Rose Lynch (left), Journalism and English Instructor works with students on the award winning APACHE newspaper.

SOME OF THE CURRENT CLUBS AND ORGANIZATIONS ARE OUTLINED AS FOLLOWS:

Agape (a Bible study and discussion group)
American Chemical Society
Apache (the campus newspaper)
Chess Club
Collegiate Chorale
Computer Club
Environment Club
Criminal Justice Club
Forensics
LeCircle Francais (created to promote interest in the French language and culture)
Nursing Student Association
Phi Beta Lambda (to promote student interest in the field of business)
Tau Alpha Pi (national junior college technology fraternity)
Phi Rho Pi (national junior college forensics fraternity)
Phi Theta Kappa (national junior college scholastic fraternity)
Reader's Theatre
Intramural Athletics
SWAP (students with Agricultural (purposes)

ATHLETICS

Men	Men & Women	Women
Cross Country	Cross Country	Basketball
Football	Track	Volleball
Basketball		Softball
Baseball		
Tennis		
Track		
Golf		

STUDENT SENATE

The Student Senate is the officially recognized student government organization at IVCC. The Senate, composed of four officers and student representatives to the Board of Trustees, and representatives of the freshman and sophomore classes (based on enrollment) meets weekly to take action on matters of concern to the entire student body and to plan events and activities for students at the college. In addition, members of the Senate serve with faculty and administrators on various committees such as: Artist Lecture; Curriculum and Academic Standards; Forum for Communication, etc.

Watch for notices regarding Student Senate petitioning and elections during September and April. Questions regarding the Student Senate, its membership and activities, should be directed to the Dean of Student Development, Room C-218.

Women's Tennis under Betty Hibben (first row, second from right), in the NJCAA National Tournament in Florida several years. They have built a winning tradition for IVCC.

Apache football can be found ranked nationally almost yearly under Coach Vincent M[illegible]on.

ACKNOWLEDGMENTS

"WHAT CAN I DO WITH A MAJOR IN . . . . . .?"

Much of the career information included in the pre-professional (transfer) section of the catalog is taken from "What Can I Do With A Major In....?" by Lawrence R. Malnig and Sandra L. Morrow, 1975, published by Saint Peter's College Press, Jersey City, New Jersey 07306.

OCCUPATIONAL OUTLOOK HANDBOOK

The majority of the Career Information in the two year Associate in Applied Science and Certificate program areas is taken from the "Occupational Outlook Handbook", 1984-85 Edition, published by the U.S. Department of Labor, Bureau of Labor Statistics. Much of the career outlook material reflects a national outlook as reported in the O.O.H.

THE OCCUPATIONAL FINDER

Special thanks to John L. Holland, Ph.D., for use of his booklet entitled "The Occupational Finder" for coding the degree and certificate programs with a student interest code. The student interest codes are directly related for use with the following career interest inventories. The Self Directed Search, The Strong-Campbell Vocational Inventory Blank, and Holland's Vocational Preference Inventory.

1984-85 McCormack Scholars

From left to right: Jeffrey Simonton, Dr. Joseph Zelenski, Dean of Student Development, Mary Ann Salz, James Lazzarotto, and Gynthia Glenn.

MCCORMACK SCHOLARS

McCormack scholarship winners are full-time students who have achieved a grade point average of 3.75 or better for three consecutive semesters with 14 or more hours per semester.

THE ADVANTAGES OF BEGINNING A 4-YEAR TRANSFER PROGRAM AT ILLINOIS VALLEY COMMUNITY COLLEGE

TRANSFER PROGRAMS ARE THE FIRST TWO YEARS OF A FOUR-YEAR PROGRAM. AFTER COMPLETING TWO YEARS AT IVCC, YOU CAN TRANSFER THE CREDITS EARNED TO A FOUR-YEAR COLLEGE OR UNIVERSITY WHERE YOU WILL COMPLETE THE LAST TWO YEARS.

THERE ARE MANY ADVANTAGES FOR YOU IN IVCC'S TWO-YEAR TRANSFER PROGRAM:

A HISTORY AND REPUTATION FOR PRODUCING TRANSFER STUDENTS AT FOUR-YEAR COLLEGES AND UNIVERSITIES

LOWER COSTS

SMALLER CLASSES

INDIVIDUAL ATTENTION

EXCELLENT INSTRUCTION

OPPORTUNITY TO IMPROVE READING, COMPOSITION, AND MATHEMATIC SKILLS TO COLLEGE LEVEL

OUTSIDE THE CLASSROOM EXPERIENCES FOR YOU IN THEATRE, ART, MUSIC, WRITING, JOURNALISM, SOCIAL WORK, PHYSICAL EDUCATION, AND GOVERNMENT

LOANS, SCHOLARSHIPS, AND ON-CAMPUS WORK OPPORTUNITIES

OPPORTUNITIES TO HEAR NATIONALLY KNOWN SPEAKERS, MUSICIANS, AND WRITERS

UNIVERSITY TRANSFER SPECIALISTS
ASSOCIATE IN ARTS DEGREE
AND
ASSOCIATE IN SCIENCE DEGREE

PREPARATION FOR THE FIRST 2 YEARS OF A 4 YEAR DEGREE PROGRAM IN THE FOLLOWING FIELDS OF STUDY

AGRICULTURE 40
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BIOLOGY 43
BUSINESS 44
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COMPUTER SCIENCE 47
CRIMINAL JUSTICE 48
DENTISTRY 50
EDUCATION 51
ENGINEERING 53
ENGLISH 54
FOREIGN LANGUAGES..... 55
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LAW 61
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MEDICINE 64
MUSIC 65
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PHARMACY 68
PHYSICAL THERAPY 69
POLITICAL SCIENCE 70
PSYCHOLOGY 71
RECREATIONAL LEADERSHIP 72
SOCIOLOGY 73
THEATRE 74
VETERINARY 75

STUDENTS INTERESTED IN MAJORS NOT LISTED MAY CONSULT WITH ANY COUNSELOR FOR ASSISTANCE IN PLANNING A PROGRAM FOR ADMISSION TO A SENIOR COLLEGE. STUDENTS INTENDING TO TRANSFER SHOULD CAREFULLY PLAN THEIR PROGRAM AT IVCC TO ASSURE THE SMOOTH AND ACCEPTABLE TRANSFER OR CREDIT. THE COUNSELING STAFF IS AVAILABLE TO ASSIST STUDENTS IN THIS SELECTION OF COURSES.

PRE-BACCALAUREATE DEGREES

(TWO-YEAR TRANSFER DEGREES)

DEGREE REQUIREMENTS

The Associate in Arts degree will be conferred on those students who have completed the basic requirements for graduation in a pre-baccalaureate program and the following specific requirements:

1. Grade Point Average of 2.0 to 4.0
2. Forty-four (44) semester hours of general education selected as specified from the following areas:

The Associate in Science degree will be conferred on those students who have completed the basic requirements for graduation in a pre-baccalaureate program and the following specific requirements:

1. Grade Point Average of 2.0 to 4.0
2. Forty-four (44) semester hours of general education selected as specified from the following areas:

	A. A.	A. S.
I. Communications	9	6
II. Humanities (select 6 hrs. each from groups A & B below under Humanities for A.A. Degree)	12	
(select any 6 hrs. from either group for A.S. Degree)		6
III. Science and Mathematics		
A.A. Degree (2 areas - 1 lab class)	11	
A.S. Degree (2 areas with one sequence lab)		23
IV. Social Science		
A.A. Degree (2 areas)	9	
A.S. Degree		6
V. Health, Physical Education and Recreation	2	2
VI. World Emphasis (select one course designated with a "w" below: 3 credit hour requirement), *This requirement can also be used to meet part of the required hours in II, III, and IV above.)	3	3
VII. Computer Literacy[d]	1	1
TOTAL	44	44

3. A total of sixty-four (64)[a] credit hours (20 hours elective).
4. Constitution Requirement[e].

THE ABOVE GENERAL EDUCATION HOURS WILL BE SELECTED FROM THE FOLLOWING COURSES:

I *COMMUNICATIONS	Cr. Hrs.
English 101	3
*English 102	3
Speech 101	3

II HUMANITIES	
"A" Emphasis (Literature & Language)	
French 101[b], 102* or 201*, 202*	4
French 203*, 204*	3
German 101[b], 102 or 201*, 202*	4
German 203*, 204*	3
Literature-American 203*, 204*	3
Literature-English 201*, 202*	3
Literature-European 201*, 202*[w]	3
Philosophy 101, 102, 103*, 105	3
Spanish 101[b], 102* or 201*, 202	4
Spanish 203*, 204*	3
Speech 202	3
"B" Emphasis (Historical & Survey)	
Art 100, 101	3
History 100[c], 101[cw]	3
History 200[c], 201[c]	3
Music 100	3

III SCIENCE & MATHEMATICS	
Biology 101, 102*, 103	4
Biology 104*	3
Botany 105*	4
Botany 109* (A.S. only)	3
Chemistry 100 (A.A. only)	3
Chemistry 106*, 107*, (202*, 203*, A.S. only)	5
Geography 101, 102, 105	4
Geography 107 (A.A. only)	3
Geology 108, 109*	4
Mathematics 100* (A.A. only), 103*	3
Mathematics 104*	2
Mathematics 102*, 105*, 200*, 201*	5
Mathematics 106*, 107*	4
Mathematics 202*, 206* (A.S. only)	3
Physical Science 100 (A.A. only)	3
Physics 109*, 200*, 201*	4
Physics 203*, 204*	5
Zoology 104* (107, 108*, A.S. only)	4

VII COMPUTER LITERACY[d]	Cr. Hrs.
Computer Literacy 101 (or any 1 hr. personal computing course)	1

Those three (3) hour courses which presently exist and are required in some of the curriculums will automatically satisfy this requirement. These courses are:
CSI 101* CSI 202* CSI 204* MTH 205*
CSI 201* CSI 203* PC 227

IV SOCIAL SCIENCE	
Anthropology 100	3
Economics 203*, 204*	3
Geography 103*, 104[w]	3
History 100[c], 101[c]	3
History 200[c], 201[c]	3
Political Science 100, 200[w]	3
Psychology 100, 200*	3
Sociology 100, 200*	3

V HEALTH, PHYSICAL EDUCATION & RECREATION	
Health, Physical Education & Recreation 100, 101*	1
Health, Physical Education & Recreation 103, 104	2
Physical Education: Coeducational 100, 101, 103, 106, 205	1
Physical Education: Men 100	1

* Prerequisite course required.

[a] A total of 60 of the 64 credit hours must have a "0" digit (baccalaureate oriented); 4 credit hours may have a "1" center digit (continuing education) or a "2" (occupational).

[b] Students who begin language at the 101 level must complete one year to receive Humanities credit.

[c] May be counted in Humanities or Social Science (not both).

[d] Requirement may be waived in Pre-Medicine, Pre-Chemistry, and Pre-Biology.

[e] Completion of either PSI 100 or HIS 200 or certification recorded on high school transcript or passage of the Constitutional exam as required by law.

BEST COPY AVAILABLE

IVCC STUDENTS BECOME VERY SUCCESSFUL TRANSFERS TO 4-YEAR COLLEGES AND UNIVERSITIES

TRANSFER ACCEPTANCE OF A.A. and A.S. DEGREES

THE "ARTICULATION COMPACT"

Based on the articulation compact, Illinois Valley Community College students in good standing, who have completed an Associate in Arts (A.A.) or an Associate in Science (A.S.) degree based on a baccalaureate-oriented sequence and who are admitted to public senior uiversities in the state of Illinois, shall be considered to (A) have attained junior standing and (b) have met their General Educational requirements.

Requirements for graduation and specific areas of study may differ at each university. Students planning to transfer to a university should consult the catalog of the university should consult the catalog of the university of their choice to plan course schedules at IVCC which will meet specific major requirements.

The Associate in Applied Science and the Associate in Liberal Studies degrees are not designed as baccalaureate-oriented degrees, although credits for some courses taken for these degrees may be accepted for transfer credit by some universities. The articulation compact does not apply to the A.A.S. or the A.L.S. degree, and questions concerning transfer credit for courses in these degree programs must be answered by the university to which transfer is being considered.

GRADUATES ATTAIN HIGH GRADES

Transfer students from Illinois Valley Community College have a higher semester grade point average than other community college students or native students, according to statistics released by Illinois state universities.

COMPARATIVE CUMULATIVE GRADE POINT AVERAGES (G.P.A.)

IVCC Transfer Students - Compared to Students from other Universities and other Community Colleges.

UNIVERSITY	Number of Transfers from IVCC	GPA IVCC Transfers	Community College Transfers GPA (not including IVCC)	Native Students GPA (Students who started at the University)
Illinois State	223 (Spring'84)	2.78	2.67	2.69
	(IVCC was number 1 for colleges transferring 200 or more students)			
Northern	119 (Fall'84)	2.92	2.72	2.62
University of Illinois	30 (Spring'84)	4.45	4.39	3.99
Western	62 (Spring'84)	2.88	2.75	2.67

AGRICULTURE TRANSFER (PRE)

Two years of a four-year degree program in Agriculture can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Career opportunities in Agriculture and related fields are abundant and expanding rapidly for the future. Currently, there are more than 25 million people employed in some aspect of U.S. Agriculture, but only about 4 million work directly on the farm or ranch. Related occupational opportunities to the crop or livestock production farmer include Agricultural accounting, Economics, Finance, Marketing, Research, Education, Agronomy, Horticulture, Communications, Mechanization, and Cooperative extension service work.

The University of Illinois offers Bachelor degrees in Agricultural Communications, Agricultural Economics, Agricultural Mechanization, Agronomy, Animal Science, Dairy Science, Horticulture, and Education.

Illinois State University offers Bachelor degrees in Agribusiness, Agriculture Production, Education, and Science.

Western Illinois University offers Bachelor degrees in Agribusiness, Agricultural Occupations, Education, and Agricultural sciences.

Southern Illinois University offers Bachelor degrees in Agricultural Education, Agricultural Industries, Forestry and Plant and Soil Science.

Agriculture Scholarship Winners.

Student Interest Code
E-S-A

ART (PRE)

Two years of a four-year degree program in Art can be completed at IVCC for most transfer schools.

IVCC counselors have prepared curriculum guides to assist students to select their courses required in this field at a number of four-year Illinois colleges and universities.

Art programs at the various transfer colleges and universities vary in terms of their requirements in the field of art.

Student Interest Code

A-I-R Artist

A-S-I - Art Teacher

College Requirements:

Students are advised to study their specific major in the college of their choice.

Education majors are advised to request a teacher certification guide.

Continued on next page

Career Leads

Art Teacher
Artist-in-Residence
Recreation specialist/instructor
Art critic/writer
Art therapist
Instructor/therapist
Administrator/therapist
Instructor/writer
Craftsman - free-lance, commission, self-employed
Historical craftsman
Architect/draftsman
Architect - self-employed
Architect - free-lance
Landscape architect
Interior designer
Administrator/planner
Project or city planner
Sculptor
Photographer
Writer
Fashion designer
Fashion specialist
Fashion writer/editor/critic
Fashion display specialist
Buyer, salesperson
Fashion coordinator
Designer/illustrator
Fashion design teacher
Weaver/designer
Owner/administrator of weaving & design studio
Consultant/Coordinator or Buyer for department stores
Sales representative
Model-maker for architects
Medical designer
Graphic designer
Corporate designer
Designer/Art Director
Graphic Artist
Illustrator/designer/art director
Illustrator/designer
Illustrator for fashion houses
Illustrator for television
Illustrator/cartoonist
Fashion Illustrator
Industrial designer
Exhibition designer
Model maker
Painter
Specialist for galleries, museums
Writer for art-related periodicals
Designer of stage sets for theater productions
Designer of toys

Hiring Institutions

Elementary, secondary, public & private schools
Colleges
Recreation Departments
Service Organizations
Newspapers, T.V. and Radio Stations
Community Centers
Churches
Hospitals
Libraries
Historical Societies
Architectural Firms
City, county state planning offices
Museums
Fashion and Trade magazines
Department stores
Boutiques
Art galleries
Fabric houses
Interior design firms
Corporations
Advertising Agencies
Pattern Companies
Self Employment
Recreation equipment manufacturers

BIOLOGY (PRE)

Two years of a four-year degree program in Biology can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

General Description

Biology is the science of living matter. It involves the study of the structure, evolutionary development, and functions of plants, animals, and microorganisms. The majority of biologists art engaged in research and development, and teaching.

Biology majors with a bachelor's degree often obtain beginning jobs which include laboratory testing, technical sales, medical technology, or high school teaching. Graduate training in a specialty such as botany, microbiology, or zoology is generally required for positions in reseqrch or administration of research programs, and for col ege-level teaching.

Career Leads

- Biochemist
- Biological photographer
- Biologist (botanist, ecologist, pharmacologist, zoologist, etc.)
- Biomedical engineer
- Biophysicist
- Chiropractor
- Dentist
- Dietitian
- Editor, science
- Environmentalist
- Food and sanitary inspector
- Forester
- Hospital administrator
- Laboratory assistant
- Lawyer
- Medical illustrator
- Medical librarian
- Medical technologist
- Museum technician
- Oceanographer
- Optometrist
- Osteopath
- Pharmacist
- Physical therapist
- Physician
- Podiatrist
- Psychologist
- Public health educator
- Salesworker, chemicals/drugs
- Soil technologist
- Teacher
- Veterinarian
- Writer: technical scienctific

Hiring Institutions

- Colleges, schools, and educational institutions
- Doctor's offices, medical clinics, and laboratories
- Government agencies:
  - Department of Agriculture
  - Department of the Interior
  - Environmental Protection Agency
  - National Institutes of Health
- Hospitals
- Medical/technical libraries
- Museums
- National and state parks
- Professional and technical journals
- Research and development firms
- Zoological/botanical gardens

Employment Outlook

Employment in biological fields is expected to increase faster than average for all occupations through the mid-1990's due to recent advances in genetic research that should result in new drugs, improved plants, and medical discoveries. Efforts to preserve the environment should also result in additional employment opportunities.

Student Interest Code
I-S-R

BUSINESS (PRE)

Two years of a four-year degree program in Business can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Business programs at transfer colleges and universities usually allow students several options in which they may choose a major course of study. The major areas are Accounting, Finance, Management, Marketing, Economics, Data Processing, and International Business.

IVCC Course Outline For Associate In Arts Degree

Business Administration

Students planning to transfer to a four year university in Business should attempt to complete the requirements of the IVCC Associate of Arts Degree. Most four year university schools of Business have certain 'core', or 'tool course' requirements which a student must complete prior to full admission to their respective schools of Business. A student should therefore attempt to incorporate as many of the necessary 'core' or 'tool' courses into their Associate of Arts degree as are required by the four year school of their choice.

The most commonly required 'core' or 'tool' courses are:

1. ACT 101 - Financial Accounting (3.0)
2. ACT 102 - Managerial Accounting (3.0)
3. BUL 200 - Legal Environment of Business (3.0)

or BUL 201 - Business Law I (3.0)
and BUL 202 - Business Law II (3.0)

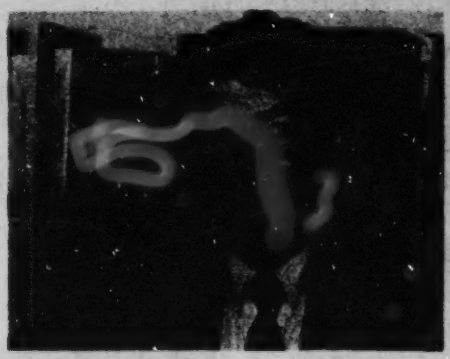
4. CSI 101 - Computer Programming (3.0)

or CSI 201 - COBOL (3.0)
or CSI 204 - PL/1 Programming (3.0)

5. ECN 203 - Principles of Economics I - Macro (3.0)
6. ECN 204 - Principles of Economics II - Micro (3.0)
7. ECN 205 - Business Statistics (3.0)
8. MTH 106 - Finite Math (4.0)

and/or MTH 107 - Calculus for Business and Social Sciences (4.0)

9. PSY 100 - General Psychology (3.0)
10. SOC 100 - Introduction to Sociology (3.0)



Lewis Cushing, Division Chairperson for Business Programs.

Students should consult with an IVCC counselor as to the particular 'core'/'tool' courses required at the various four-year schools.

A separate guide is available for students considering transfer to the University of Illinois--see an IVCC counselor for a copy.

CHEMISTRY (PRE)

Two years of a four-year degree program in Chemistry can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

General Description

Chemists study the structure and composition of substances, and the ways in which they are changed and transformed. Their varied activities include the creation of products such as synthetics and vaccines, as well as the application of new knowledge to fields such as nutrition, genetics, and environmental protection.

About three-fourths of all chemists are employed by private industry, and the majority of them are engaged in research and development. Graduates with a bachelor's degree usually find beginning jobs in analysis and testing, sales, or quality control. Graduate training is generally required for positions in research or college teaching.

Career Leads

Biochemist
Chemical engineer
Chemical processing plant supervisor
Chemist (analytical, quality control, research)
Dentist
Dietician
Editor, scientific
Environmentalist
Food sanitary inspector
Hospital administrator
Industrial health engineer
Laboratory assistant
Laboratory technician/tester
Manager, industrial organization
Medical illustrator
Medical librarian
Medical technologist
Oceanographer
Patent attorney
Pharmacist
Pharmacologist
Physician
Production manager
Public health educator
Research & development
Salesworker, chemicals/drugs
Teacher
Writer: technical, scientific

Dr. William Seremak (seated), Chemistry Instructor.

Hiring Institutions

Business corporations and industries
Colleges, schools, and educational institutions
Doctor's offices, medical clinics, and laboratories
Engineering firms
Government agencies:
- Department of Agriculture
- Department of Defense
- Department of Health, Education and Welfare
- Department of the Interior

Hospitals
Manufacturing and processing firms
Medical/technical libraries
Mining/petroleum companies
Professional and technical journals
Research and development firms
Utilities companies

Student Interest Code
I-A-R

COMMUNICATIONS – JOURNALISM (PRE)

Two years of a four-year degree program in Communications/Journalism can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Communications (journalism) is a very broad field offering opportunities in public relations, advertising, radio and television announcing and production, reporting and editing, technical writing, and photography. Students with strong backgrounds in reporting, editing and broadcasting may depend heavily on the mass media (newspapers, television, radio, magazines) for job opportunities; but communications specialists are employed by businesses and industries, governments, schools, hospitals, and non-profit organizations--any institution interested in conveying information or opinions to an audience. Some communications areas, particularly writing and photography, are adaptable to part-time and free-lance work.

Training

Most employers prefer college graduates for communications jobs, but requirements vary widely throughout the field. Broadcast station officials evaluate taped auditions in hiring on-the-air personnel; print media officials evaluate a writer's published articles or a photographer's portfolio.

Employers generally prefer a student with a broad education--a strong liberal arts or humanities background or a speciality in a field such as economics, politics, sports, law, science.

College programs are available in a variety of communication areas including public relations, advertising, news-editorial writing, broadcasting, and still and motion photography. These programs are usually administered by a journalism or communications department.

Employment Outlook

Competition is keen for most communications jobs, but jobs will be available through the mid-1990's for talented people. Opportunities will be stronger for those with the appropriate training and experience and for those willing to start with jobs in small towns.

Employment of writers and editors is expected to increase faster than the average for all occupations through the mid-1990's. The best opportunities will be with business and trade publications and in technical writing.

Employment of public relations specialists, broadcast announcers, reporters and correspondents is expected to increase about as fast as the average for all occupations through the mid-1990's. New graduates with some experience, perhaps as interns, will have the best chances.

Employment for photographers is expected to grow more slowly than the average for all occupations through the mid-1990's.

Student Interest Code
A-S-I
A-I-S
A-I-R

COMPUTER SCIENCE (PRE)

Two years of a four-year degree program in Computer Science can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Computer systems have become an increasingly important part of every day life. Today these machines bill customers, record airline and hotel reservations, monitor factory production processes, help determine the flight path of a space probe, and forecast changes in the economy. They collect, store, and sort vast amounts of data.

Individuals with degrees in computer science usually become programmers or systems analysts. Programmers write computer instructions and translate the instructions into machine readable language. Systems analysts design systems for processing information or solving either business or scientific problems.

Programmers and systems analysts usually work for large firms. Most are employed by manufacturers, banks, insurance companies, data processing service organizations, and government agencies.

The employment outlook for programmers and systems analysts is expected to grow faster than the average for all occupations through the mid-1990's, particularly in programmer applications.

Various universities offer computer science programs emphasizing different areas of application such as business, mathematics, and scientific programming in addition to pure computer science. Students planning to major in computer science at a four year college or university should consult with an IVCC counselor as to the specific requirements of a particular four-year school.

Most students will want to acquire the Associate of Arts degree prior to transferring to a four-year school to major in computer science. While completing the requirements of the Associate of Arts degree the student should select those particular courses required by and transferable to the college or university of their choice.

Again, it should be stressed that different four-year schools have different requirements. Careful attention should be paid to the requirements of the college or university the student wants to attend after IVCC.

STUDENTS ARE ADVISED TO STUDY THEIR SPECIFIC MAJOR IN THE COLLEGE OF THEIR CHOICE.

Two years of a four-year degree program in Pre-Criminal Justice can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

Training and Other Qualifications

Personal qualifications such as honesty and an understanding of human nature are important. In addition to educational requirements, most workers in protective and related services must undergo formal training programs and get on-the-job experience before they are fully qualified. Training programs last from several days to a few months and emphasize specific job-related skills.

Nature of the Work

The growth of our Nation's population and economy has put an increasing emphasis on protective services.

Graduates with a bachelor's degree can choose from many career opportunities in the public and private protective services area. These opportunities include such occupations as Correction officers, FBI special agents, Department of Immigration and Naturalization agents, City and County Police Officers, State Police Officers, and many other private and public occupations in the protective services area.

Employment Outlook

Employment opportunities in the Criminal Justice and related areas are expected to be good in the future with opportunities expanding as the population increases and the diversity of our society and economy continues.

IVCC Course Outline for Associate in Arts Degree
(with elective courses in)
Criminal Justice

First Semester		Course Applies To:		
Course No./Name	Cr.	Gen. Ed.	Major	Elective
CRJ 100 - Introduction to Criminal Justice	3		X	
ENG 101 - English Composition I	3	X		
PSY 100 - General Psychology	3	X		
SPH 101 - Fundamentals of Speech	3	X		
Humanities	3	X		
Physical Education and Health	1	X		
	16			

(continued on next page)

Criminal Justice (Pre)
(continued)

Second Semester		Course Applies To:		
Course No./Name	Cr.	Gen. Ed.	Major	Elective
CRJ 103 - Juvenile Delinquency	3		X	
ENG 102 - English Composition II	3	X		
PSI 100 - American National Government	3	X		
Science - Math	4	X		
Humanities	3	X		
	16			

Third Semester				
CRJ 201 - Criminal Investigation	3		X	
CRJ 203 - Evidence & Criminal Procedures	3		X	
PSI 102 - State and Local Government	3	X		
Science - Math	4	X		
Humanities	3	X		
Physical Education and Health	1	X		
	17			

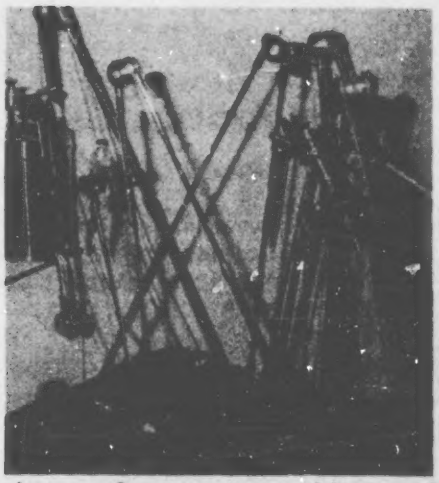
Fourth Semester				
CRJ 107 - Introduction to Corrections	3		X	
CRJ 202 - Criminal Law	3		X	
SOC 100 - Introduction to Sociology	3	X		
Science - Math	3	X		
Humanities	3	X		
	15			

Sangamon State University and
Southern Illinois University - A capstone program is also available with the A.A.S. Criminal Justice.

STUDENTS ARE ADVISED TO STUDY THEIR SPECIFIC MAJOR IN THE COLLEGE OF THEIR CHOICE.

Student Interest Code
R-S-E

DENTISTRY (PRE)



Two years of a four-year degree program in Pre-Dentistry can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Dentists examine teeth and other tissues of the mouth to diagnose diseases or abnormalities. They take x-rays, fill cavities, straighten teeth, and treat gum diseases. Dentists extract teeth and substitute artificial dentures designed for the individual patient. They also perform corrective surgery of the gums and supporting bones. In addition, they may clean teeth.

Dentists spend most of their time with patients, but may devote some time to laboratory work such as making dentures and inlays. Some dentists also employ dental hygienists to clean patients' teeth and provide instruction for patient self-care.

Most dentists are general practitioners who provide many types of dental care; about 10 percent are specialists.

Training and Other Qualifications

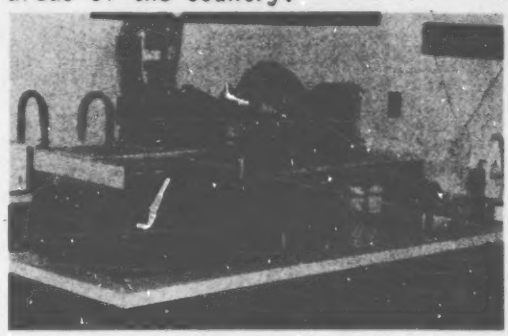
Dental schools require a minimum of two to four years of college level predental education. Four out of five of the students entering dental schools in 1982 had a bachelor's or master's degree. Dental school generally lasts four academic years.

In selecting students, dental schools give considerable weight to college grades. Many state supported dental schools give preference to residents of their states.

In addition, all dental schools participate in a nation-wide testing program, and scores earned on these tests are considered along with information gathered about the applicant through recommendations and interviews. Dentistry requires both manual skills and a high level of diagnostic ability. Dentists should have good visual memory, excellent judgment of space and shape, and a high degree of manual dexterity, as well as scientific ability.

Employment Outlook

Employment of dentists is expected to grow about as fast as the average for all occupations through the mid-1990's. Because of abundant supply of practitioners, the employment situation for dentists is becoming competitive in some areas of the country.



Student Interest Code
I-R-E

EDUCATION (PRE)

Business Education	Secondary Education
Elementary Education	Special Education
Physical Education Men/Women	Speech Therapy (Many others)

Two years of a four-year degree program in Education can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

General Description

Education is concerned with methods of instruction which promote human development and learning. Although most graduates begin their careers in education as teachers, nearly half of the five million persons employed in this field are engaged in administration and personnel work, or in supplying technical and supportive services.

Since there is no longer a teacher shortage, the employment situation has become increasingly competitive in recent years. There is still, however, a considerable demand for teachers in the inner-city and in parochial schools. There are also opportunities in special education, pre-school education, and the teaching of industrial arts and vocational subjects. A steady number of openings are created each year by people who leave or retire from the profession.

Career Leads

<u>Elementary and Secondary School Positions</u>

Athletic Coach
Audiovisual specialist
Dietitian
Guidance counselor
Librarian
Pre-school, elementary teacher
Principal or superintendent of schools
Psychologist
Social Worker
Teacher, secondary school (commericial subjects, home economics, industrial arts, physical education)
Teacher, special education (handicapped, mentally retarded, learning disabilities)
Tutor

<u>College Positions</u>

Administrators: alumni secretary, dean, director of admissions, financial aid or student activities, registrar, etc.
Business Manager
Counselor
Librarian
Personnel manager
Placement director
Public relations
Purchasing agent
Teacher

<u>Other</u>

Recreation director
Rehabilitation counselor
Saleworker, books
Speech pathologist/ audiologist

(Continued on next page)

Education (Pre)
(continued)

Hiring Institutions

Adoption and child care agencies
Board of Education
Bookstores
Colleges, schools, and educational institutions
Community organizations:
(recreation departments, YM-YWCA's. YM-YWHA's, Boy Scouts, Girl Scouts, etc.)
Day care centers and nursery schools
Educational T.V./film companies
Government agencies:
Department of Health, Education and Welfare
Department of State:
Indian reservations, overseas schools for military dependents, Peace Corps
Libraries
Social service agencies
Test development corporations

Kenneth Pyszka, Education and Psychology Instructor.

Student Interest Code
Primary Code:S

ENGINEERING (PRE)

Two years of a four-year degree program in Engineering can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

In 1976, more than 1.1 million persons were employed as engineers, the second largest professional occupation, exceeded only by teachers. Most engineers specialize in one of the more than 25 specialties recognized by professional societies. Some of these are: aerospace, agricultural, biomedical, ceramic, chemical, civil, electrical, industrial, mechanical, metallurgical, mining, and petroleum engineering.

Nature of the Work

Engineers apply the theories and principles of science and mathematics to practical technical problems. Often their work is the link between a scientific discovery and its useful application. Engineers design machinery, products, systems, and processes for efficient and economical performance. They develop electric power, water supply, and waste disposal systems to meet the problems of urban living. They design industrial machinery and equipment used to manufacture goods; and heating, air-conditioning, and ventilation equipment for more comfortable living.

In addition to design and development, many engineers work in testing, production, operation, or maintenance. They supervise the operation of production processes, determine the causes of breakdowns, and perform tests on newly manufactured products to ensure that quality standards are maintained. They also estimate the time needed to complete engineering projects and their cost.

Training

A bachelor's degree in engineering is the generally accepted educational requirements for beginning engineering jobs. College graduates trained in one of the natural sciences or mathematics also may qualify for some beginning jobs.

In a typical 4-year curriculum, the first 2 years are spent studying basic sciences-mathematics, physics, chemistry, introductory engineering, and the humanities, social sciences, and English. The last 2 years are devoted, for the most part, to specialized engineering courses.

SUCCESS OF GRADUATES FROM IVCC TO UNIVERISTY OF ILLINOIS

GRADUATES FROM THE U. OF I. ENGINEERING SCHOOL

1974-1984
10 years

IVCC G.P.A. 4.193 U. of I. G.P.A. 4.147

DIFFERENCE 0.046

The ten (10) year difference between the grade point average (g.p.a.) transferred from IVCC and the grade point average attained at the University of Illinois is .046 or less than five hundreths (.05) of a g.p.a. difference. The engineering department was most complimentary on the graduates they have been receiving from IVCC.

Student Interest Code
I-R-E

ENGLISH (PRE)

Two years of a four-year degree program in English can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

General Description

Students of English investigate and practice the skillful use of language to express, evaluate, and evoke human responses to experience and deepen understanding of human nature. They analyze and appreciate the various literary art forms--poetry, drama, prose--both fictional and factual. They also study theories and methods of literary criticism which they then apply to important works by major authors of American, British, and European literary movements.

A bachelor's degree is usually adequate for entry-level jobs in advertising, publishing, journalism, business, industry, and personnel. In addition, the bachelor's level will provide entry into public school teaching. For the professions, such as law or college teaching, advanced degrees are necessary; post-graduate work is also helpful for those who wish to become editors, reviewers, researchers, or indeed writers.

Career Leads

- Administrative officer (federal, state, county, municipal)
- Advertising manager
- Advertising salesworker
- Announcer, T.V./radio
- Archivist
- Bank officer
- Business/management trainee
- Clergy
- Columnist (fashion, political, society, sports)
- Computer programmer
- Copy writer (advertising)
- Critic (books, drama, film)
- Editor (books, magazines, newspapers)
- Insurance agent/broker
- Lawyer
- Librarian
- News editor (radio/T.V.)
- Newspaper reporter
- Personnel Work
- Photographer, news
- Proofreader
- Public relations (promotion, publicity, public information writer)
- Research assistant (documents and records)
- Salesworker, books
- Speech pathologist/audiologist
- Stockbroker
- Teacher
- Travel agent
- Writer: business trade, technical publications
- Writer, free-lance
- Writer: technical, scientific

Hiring Institutions

- Advertising agencies and departments
- Air, bus, and rail lines
- Banks and investment firms
- Bookstores
- Business corporations and industries
- Colleges, schools, and educational institutions
- Department stores
- Film companies
- Government agencies
- Insurance companies
- Libraries
- Magazines, newspapers, and periodicals
- Professional and technical journals
- Public relations firms
- Publishing companies
- Radio/T.V. industry
- Travel agencies

Student Interest Code
A-S-E

FOREIGN LANGUAGES (PRE)

Two years of a four-year degree program in Foreign Languages can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Spanish, German, and French are the Foreign Languages offered by I.V.C.C.

General Description

Language is the system by which the ideas and feeling of human experience are communicated. The study of a foreign language helps to put our own language and culture into perspective, and thus to understand it better. It also gives us access to foreign people, places, things. The study of foreign languages is broadening: you become, in a sense, a new person in each new language you learn.

A foreign language major is good general liberal arts preparation for professions, for business, and for government. Specific businesses such as travel bureaus and foreign traders seek those with foreign language fluency. With a bachelor's degree one can teach in secondary schools, although college instructors or professional linguists need advanced work beyond the bachelor's.

Career Leads

Audio-visual specialist
Business/management trainee
College/university official
Community organization worker
Computer Programmer
Copy writer (advertising)
Customs officer
Flight correspondent
Foreign service officer
Immigration inspector
Import-export agent
Intelligence specialist
International relations specialist
Interpreter
Lawyer
Librarian
Museum guide or technician
Peace Corps
Public relations
Research assistant (documents and records)
Research/technical advisor (films)
Scientific linguist (philologist, etymologist)
Social/welfare worker
Teacher
Translator
Travel agent
Tour guide
Writer: Business, trade, technical publications
Writer, foreign language newsscripts

Hiring Institutions

Advertising agencies and departments
Air, bus, and rail lines
Banks and investment firms
Business corporations and industries
Film companies
Government agencies:
- Agency for International Development
- Department of Justice
- Department of State

Import-export companies
Libraries
Magazines, newspapers, and periodicals
Museums
Professional and technical journals
Public relations firms
Radio/T.V. industry
Social service agencies
Travel agencies
United Nations

Student Interest Code
S-A-E (Teacher)
A-S-E (Interpreter)

FORESTRY (PRE)

Two years of a four-year degree program in Forestry can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Employment Outlook

Employment of foresters and conservationists is expected to grow more slowly than the average for all occupations through the mid-1990's. Employment should continue to grow faster in private industry than in federal and state governments.

Nature of the Work

Forests are a vital natural resource. They can be used repeatedly without being destroyed. If properly managed. Foresters manage, develop, and protect these lands and their resources - timber, water, wildlife, forage, and recreational areas.

Foresters plan and supervise the cutting and planting of trees. They also protect the trees from fire, harmful insects, and disease. Foresters often specialize in one area of work, such as timber management, outdoor recreation, or forest economics.

Nearly two out of five foresters work in private industry, mainly for pulp and paper, lumber logging, and milling companies. About one-fourth work for the Federal government, primarily in the Forest Service of the Department of Agriculture.

Training

A bachelor's degree with a major in forestry is the minimum educational requirement for those desiring professional careers in forestry. However, due to keen job competition and the increasingly complex nature of the forester's work, employers prefer graduates who hold advanced degrees. Certain jobs such as teaching and research require advanced degrees.

Student Interest Code
R-I-S

GEOGRAPHY (PRE)

Two years of a four-year degree program in Geography can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Geographers study the distribution and location of various characteristics of the earth's surface. Geographers specialize, as a rule. Economic geographers deal with the geographic distribution of an area's economic activities. Political geographers are concerned with the relationship of geography to politics. Physical geographers study the physical characteristics of the earth. Urban geographers study cities and metropolitan areas while regional geographers study the physical, climatic, economic, political, and cultural characteristics of a particular region or area, which may range in size from a river basin to a state, country, or continent, Cartographers design and construct maps and charts. Medical geographers study the effect of the environment on health.

Places of Employment

Well over 10,000 persons worked as geographers in 1984, excluding those teaching in secondary schools.

Colleges and universities employ about three-fifths of all geographers. The Federal government also is an important employer. Many work in mapping and intelligence, cartography, aerial photograph interpretation, remote sensing, and environmental activities.

Training

The minimum educational requirements for beginning positions in geography in government, industry, or secondary schools usually is a bachelor's degree with a major in the field. Bachelor's degree holders would find it helpful to have training in a specialty such as cartography, aerial photograph or remote sensing data interpretation, statistical analysis, or environmental analysis.

A master's degree usually is the minimum requirement for the position of college instructor, and is important for advancement in business and government.

Employment Outlook

Employment of geographers is expected to grow faster than many occupations. Little growth is anticipated in college and university teaching, the traditional employer of many highly qualified geographers; as a result, many such geographers may seek nonacademic position, especially in environmental sciences.

Student Interest Code
I-R-S

GEOLOGY (PRE)

Two years of a four-year degree program in Geology can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Geologists and geophysicists study the structure, composition, and history of the earth. By examining surface rocks, drilling to recover rock cores, and seismic prospecting techniques, they determine the types and distribution of rocks beneath the earth's surface. They also identify rocks and minerals, conduct geological surveys, construct maps, and use instruments such as the gravimeter and magnetometer to measure the earth's gravity and magnetic field. Geological research helps to determine the structure and history of the earth and may result in significant advances such as the ability to predict earthquakes. An important application of geological research is locating oil and other minerals.

Besides locating resources and working in laboratories, geologists and geophysicists also advise construction companies and governmental agencies on the suitability of proposed locations for buildings, dams, or highways.

Geologists usually specialize in one or a combination of three general areas--earth materials, earth processes, and earth history.

Places of Employment

More than two-fifths of all geologists work in private industry. Most industrial geologists work for petroleum and gas companies. Geologists also work for mining and quarrying companies.

The Federal Government employs almost 5,600 geologists. Two-thirds work for the Department of the Interior in the U.S. Geological Survey, the Bureau of Mines, and the Bureau of Reclamation.

Colleges and universities employ about 7,000 geologists. Some work for nonprofit research institutions and museums.

Training

A bachelor's degree in geology or geophysics is adequate for entry into some geology jobs. An advanced degree is helpful for promotion in most types of work, and is essential for college teaching and many research positions.

Employment Outlook

Employment of geologists and geophysicists is expected to grow about as fast as the average for all occupations through the mid-1990's. Geologists and geophysicists who have knowledge and experience in geophysical oil and gas exploration may experience better employment opportunities than others.

Student Interest Code
I-R-A

HISTORY (PRE)

Two years of a four-year degree program in History can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

General Description

History is a narrative account of the political, social, and cultural events and achievements of mankind. Historians evaluate and analyze documents and records relating to the deeds and aspirations of past generations, and use this knowledge to understand and interpret the present.

A bachelor's degree is usually sufficient for entry jobs in government service, communications, banking, finance, and sales. An advanced degree is necessary to consider oneself a professional historian and to obtain jobs in college teaching, research, or archival work.

Career Leads

- Administrative officer (federal, state, county, municipal)
- Archeological assistant
- Archivist
- Bank officer
- Business/management trainee
- Chamber of Commerce executive
- Customs officer
- Director, state historical society
- Editor/journalist
- Election procedures advisor
- Foreign service officer
- Historian
- Insurance agent/broker
- Intelligence specialist
- Lawyer
- Librarian
- Museum guide or technician
- Park superintendent (government)
- Public relations
- Research assistant (documents and records)
- Research/technical advisor (films)
- Social/welfare worker
- Supervisor of historic sites
- Teacher
- Tour guide
- Travel agent
- Writer, free-lance

Hiring Institutions

- Air, bus, and rail lines
- Archives
- Banks and investment firms
- Business corporations and industries
- Chamber of Commerce
- Colleges, schools, and educational institutions
- Film companies
- Foundations and non-profit organizations
- Government agencies:
  - National Archives
  - Department of Defense
  - Department of the Interior
  - Department of State
- Historical societies
- Insurance Companies
- Libraries
- Magazines, newspapers and periodicals
- Museums
- National and state parks
- Publishing companies
- Public relations firms
- Radio/T.V. industry
- Travel agencies
- Social service agencies

Student Interest Code
S-E-I

HOME ECONOMICS (PRE)

Two years of a four-year degree program in Home Economics can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

Nature of the Work

Home economists work to improve products, services, and practices that affect the comfort and well-being of the family. Some specialize in specific areas, such as consumer economics, housing, home management, home furnishings, and equipment, food and nutrition, clothing and textiles, and child development and family relations.

Employment Opportunities

Most home economists teach. Those in high schools teach about foods and nutrition; clothing selection, construction and care; child development; consumer education; housing and home furnishings; family relations; and other subjects related to family living and homemaking.

Federal, State, and local governments and private agencies employ home economists in social welfare programs to advise and counsel clients on the practical knowledge and skills needed for effective everyday family living.

Education

About 350 colleges and universities offer a bachelor's degree in home economics, which qualifies graduates for most entry positions in the field.

Home economics majors study sciences and liberal arts - particularly social sciences - as well as specialized home economics courses. They may concentrate in a particular area of home economics or in what is called general home economics.

Employment Outlook

Home economists, especially those wishing to teach in high schools, will face keen competition for jobs through the mid-1980's. Other areas of home economics also will experience competitive job market conditions as those unable to find teaching jobs look for other positions. However, for those willing to continue their education toward an advanced degree, employment prospects in college and university teaching are expected to be good.

Student Interest Code
S-A-E

LAW (PRE)

Two years of a Pre-Law degree program can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

Nature of the Work

Lawyers perform a wide variety of tasks, but certain basic activities are common to nearly every attorney's work. Probably the most fundamental of all is interpretation of the law. In order to interpret the law knowledgeably, lawyers do research. They must stay abreast of their field, in both legal and nonlegal matters. Usually a lawyer's work also involves contact with people. Attorneys consult with their clients to determine the details of their specific problems, advise them of the law, and suggest actions that might or must be taken.

Training and Other Qualifications

In order to practice law in the courts of any State, a person must be admitted to its bar. To qualify for the bar examination in most States, an applicant must have completed 3 years of college and have graduated from a law school approved by the American Bar Association (ABA) or the proper State authorities. (ABA approval signifies that the law school meets the minimum standards necessary to allow its graduates to take the bar exam and practice law in any State.) The required college and law school education usually takes 7 years of full-time study after high school - years of undergraduate study followed by 3 years in law school. Although a number of law schools accept students after 3 years of college, an increasing number require applicants to have a bachelor's degree. Competition for admission to law school has become intense in the last few years. Acceptance by most law schools depends on the applicant's ability to demonstrate an aptitude for the study of law, usually through good grades and the Law School Admission Test (LSAT), adminstered by the Educational Testing Service.

Employment Outlook

A rapid increase in the number of law school graduates has created keen competition for the available jobs. In the years ahead, the number of graduates is expected to increase further and intensify this competition.

Student Interest Code
E-S-A

MATHEMATICS (PRE)

Two years of a four-year degree program in Mathematics can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

Ralph Powell, Mathematics Instructor

General Description

Mathematics study concepts and theories used to solve problems involving quantitative relationships. Those engaged in research to discover new theories or to increase basic knowledge are classified as theoretical mathematicians. Those who develop techniques and approaches to solve problems in the physical and social sciences, or in business and industry, are classified as applied mathematicians.

Students with a bachelor's degree in mathematics can find beginning jobs in the fields of physics, engineering, space technology, economics, business management, statistics, medical research, environmental sciences, math education, and other fields, but they will need advanced degrees to secure more reponsible positions. A bachelor's degree in mathematics will provide an excellent background for advanced study in computer science.

Career Leads

Accountant
Actuary
Air traffic controller
Architect
Budget/management analyst
Business/management trainee
Cartographer
Computer programmer
Cryptographer
Draftsman
Efficiency engineer
Financial/investment analyst
Financial planner
Insurance agent/broker
Internal Revenue agent
Lawyer
Market research analyst
Mathematical technician
Mathematician (applied, research)
Meteorologist
Navigator
Operations research analyst
Pilot, airplane
Psychometrician
Quality control analyst
Salary and wage administrator
Securities trader (banking)
Statistician
Stockbroker
Surveyor
Systems analyst
Teacher
Technical illustrator

Hiring Institutions

Banks and investment firms
Business corporations and industries
Colleges, schools, and educational institutions
Engineering firms
Government agencies:
Department of Defense
Insurance companies
Market research departments and firms
Professional and technical journals
Research and development firms
Test development corporations
Utilities companies

Student Interest Code
I-R-A

MEDICAL TECHNOLOGY (PRE)

Two years of a four-year degree program in Medical Technology can be completed at IVCC for some transfer schools.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Greg Oseland, Anatomy and Physiology and Biology Instructor; also assistant men's basketball coach.

Nature of the Work

Laboratory tests play an important part in the detection, diagnosis, and treatment of many diseases. Medical laboratory workers, often called clinical laboratory workers, include three levels: medical technologists, technicians, and assistants. They perform tests under the general direction of pathologists (physicians who diagnose the causes and nature of disease) and other physicians, or scientists who specialize in clinical chemistry, microbiology, or the other biological sciences.

Medical technologists, who require four years of postsecondary training, perform complicated chemical, microscopic, and bacteriological tests.

Technologists in small laboratories often perform many types of tests. Those in large laboratories usually specialize in areas such as microbiology, parasitology, biochemistry, blood banking, hematology (the study of blood cells), and nuclear medical technology (the use of radioactive isotopes to help detect diseases).

Most medical technologists conduct tests related to the examination and treatment of patients and are called on to display independent judgment. Some do research, develop laboratory techniques, teach, or perform administrative duties.

Training

The requirement for a beginning job as a medical technologist is a bachelor's degree with a major in medical technology. The course of study includes courses in chemistry, biological sciences, microbiology, and mathematics, plus one year of practical experience in laboratory work. These programs are offered by colleges and universities as well as by hospitals.

Employment Outlook

Employment of clinical laboratory workers is expected to grow faster than the average for all occupations through the mid-1990's. Rapid growth in employment is expected because of the importance of laboratory tests for medical diagnosis and treatment.

Student Interest Code
I-S-A

MEDICINE (PRE)

Two years of a four-year Pre-Medicine program can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Physicians perform medical examinations, diagnose diseases, and treat people who are suffering from injury or disease. They also try to prevent illness by advising patients on self-care related to diet and exercise. Physicians generally examine and treat patients in their own offices and in hospitals, but they also may visit patients at home.

About 15% of M.D.'s are general practitioners, while 85% are specialists. The largest specialties are internal medicine, general surgery, obstetrics, and gynecology, psychiatry, pediatrics, radiology, anesthesiology, ophthalmology, pathology, and orthopedic surgery. The most rapidly growing specialties are in the primary care area - family practice, internal medicine, and pediatrics.

Training and Other Qualifications

All states, the District of Columbia, and Puerto Rico require a license to practice medicine. Requirements for licensure include graduation from an accredited medical school, successful completion of a licensing examination, and, in most states, a period of one or two years in an accredited graduate medical education program (residency). The licensing examination taken by most graduates of U.S. medical schools is the National Board of Medical Examiners (NBME) test.

The minimum educational requirement for entry to a medical school is three years of college; some schools require four years. A few medical schools allow selected students who have exceptional qualifications to begin their professional study after two years of college. Most students who enter medical schools have a bachelor's degree.

Required premedical study includes undergraduate work in English, physics, biology, and inorganic and organic chemistry. Students should take courses in the humanities, mathematics, and the social sciences to acquire a broad general education.

Employment Outlook

Job opportunities for physicians through the mid-1990's will reflect faster than average employment growth. Supply and demand are projected to be roughly in balance through the mid-1990's. Foreign trained physicians (including U.S. citizens who completed their training abroad) currently account for approximately one-sixth of all newly licensed physicians and one-fifth of all M.D.'s in practice. The Bureau of Health Professions anticipates the supply of foreign trained physicians to grow more slowly through the mid-1990's than in the past. Of new physicians who enter practice each year through 1995, approximately one in ten will be a foreign medical graduate.

Student Interest Code
I-S-A

MUSIC (PRE)

Two years of a four-year degree program in Music can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universties.

The important role that music plays in most people's lives makes it difficult to imagine a world without musicians. Professional musicians are those whose livelihoods depend upon performing for the enjoyment of others. As a rule, musicians specialize in either popular or classical music; only a few play both types professionally.

In addition to performing, musicians can teach instrumental and vocal music in schools and colleges, or give private lessons in their own studios or in pupils' homes. Others combine careers as performers with work as arrangers and composers.

Places of Employment

About 135,000 persons worked as performing musicians in 1984. Thousands more taught in elementary and secondary schools and in colleges and universities. Numerous communities have orchestras and dance bands which offer at least part-time work. The various branches of the Armed Forces also offer career opportunities in a variety of musical organizations. Music consists of five areas: 1) the creative careers--song-writer, musician, conductor/director, group member or leader, singer, instrumentalist, musical producer, etc.; 2) trade magazines, critics, and disc jockeys; 3) the business careers--publisher, manager, agent, sales, librarian, advertising and public relations; 4) education--private and public, elementary through universities; and 5) music therapy--hospital, private and clinic.

William Hall, Music Instructor (right), works on a music applications assignment with a student.

Training and Other Qualifications

People who become professional musicians begin study at an early age. To acquire technical skill, a thorough knowledge of music, and the ability to interpret music, young people need intensive training through private study with an accomplished musician, in a college or university which has a stong music program, or in a conservatory of music.

Musicians who play popular music must understand a feeling for that style of music, but classical training may expand their employment opportunities.

Young persons who consider careers in music should have musical talent, versatility, creative ability, poise and stage presence to face large audiences. Since quality of performance requires constant study and practice, self-discipline is vital.

Employment Outlook

The non-traditional fields of music will continue to grow as fields such as electronic and video music continue to expand. The growth of schools for the commentary careers has grown in proportion to the number of radio stations, which has expanded from 2500 in 1950 to more than 7200 today. To work in these lucrative, rarefied, highly competitve areas, students do need substantial formal musical training. The record industry is growing, with programs adapted to meet its needs in several colleges. New stature has been given to Advertising/Promotion/Publicity in today's music. It is a rapidly expanding field. Job opportunities in education are expanding. The enrollment of all school students will rise by four million in 1992 (from 30 to 34). Projections are that many new jobs will be available due to a rise in the number of students enrolling in school and a lower number of college students entering the field of education. (Source: National Center for Educational Statistics, New York Times, 7/24/84.) It is expected that states will increase beginning teachers' pay to attract more persons to a teaching career. Music Therapy is a young field, one in which demand exceeds the supply. It requires five years of study generally.

Student Interest Code
A-S-I

Students from the major fall music department production of a Madrical Dinner.

NURSING (PRE)

Two years of a four-year degree program in Nursing can be completed at IVCC for some schools.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nursing plays a major role in health care. As important members of the health care team, registered nurses perform a wide variety of functions. They observe, evaluate, and record symptoms, reactions, and progress of patients, administer medications, assist in the rehabilitation of patients, instruct patients and family members in proper health maintenance care, and help maintain a physical and emotional environment that promotes wellness.

Baccalaureate Training

A license is required to practice professional nursing in all states and in the District of Columbia. To get a license, a nurse must be a graduate of a school of nursing approved by the state board of nursing and pass a written state competency examination. Nurses may be licensed in more than one state, either by examination or endorsement of a license issued by another state.

A minimum of a baccalaureate degree is preferred for those who aspire to administrative or management positions, and those planning to work in research, consultation, teaching, or clinical specialization, which require education at the master's level. Graduation from high school or GED completion is required for admission to all schools of nursing.

Employment Outlook

The many changes in technology and the health care delivery system have made for many and varied opportunities in the nursing profession. Hospitals, clinics, home health agencies, long-term care facilities, and nursing homes are some of the areas open to registered nurses.

In the immediate area, employment for nurses is competitive. Employment for nurses in areas throughout the country varies greatly.

Student Interest Code
S-I-A

PHARMACY (PRE)

Two years of a Pre-Pharmacy degree can be completed at IVCC for most schools.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Pharmacists dispense drugs and medicines prescribed by medical and dental practitioners and supply and advise people on the use of many medicines that can be obtained with and without prescriptions. Pharmacists must understand the use, composition, and effect of drugs and often test them for purity and strength.

Many pharmacists employed in community pharmacies also have duties. Besides dispensing medicines, some pharmacists buy and sell nonpharmaceutical merchandise, hire and supervise personnel, and oversee the general operation of the pharmacy.

Pharmacists in hospitals and clinics dispense prescriptions and advise the medical staff on the selection and effects of drugs; they also make sterile solutions, buy medical supplies, teach in schools of nursing and allied health professions, and perform administrative duties.

Training

A license to practice pharmacy is required in all states and the District of Columbia. To obtain a license, one must be a graduate of an accredited pharmacy college, pass a state board examination and - in nearly all states - have a specified amount of practical experience or internship under the supervision of a registered pharmacist.

At least five years of study beyond high school are required to graduate from one of the degree programs accredited by the American Council on Pharmaceutical Education in the 72 colleges of pharmacy. Most graduates receive a Bachelor of Science (B.S.) or a Bachelor of Pharmacy (B. Pharm.) degree.

Admission requirements vary. A few colleges admit students directly from high school. Most colleges of pharmacy, however, require entrants to have completed one or two years of prepharmacy education in an accredited junior college, college, or university.

The bachelor's degree in pharmacy is the minimum educational qualification for most positions in the profession.

Employment Outlook

Employment of pharmacists is expected to grow about as fast as the average for all occupations through the mid-1990's. Employment is expected to rise more rapidly in hospitals than in community pharmacies. In some localities, particularly large metropolitan areas, there appears to be imbalances leading to intensified competition, a situation that may continue.

Student Interest Code
I-E-S

PHYSICAL THERAPY (PRE)

Two years of a four-year degree program in Physical Therapy can be completed at IVCC for most schools.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Physical therapists plan and administer treatment in order to restore bodily functions, relieve pain, and prevent or limit permanent disability to those suffering from a disabling injury or disease. Their patients include accident victims, handicapped children, and stroke victims. Physical therapy also is used in the treatment of multiple sclerosis, cerebral palsy, nerve injuries, amputations, fractures, and arthritis.

Training and Other Qualifications

All states require a license to practice physical therapy. Applicants for a license must have a degree or certificate from an accredited physical therapy educational program and to qualify must pass a state board examination.

The physical therapy curriculum includes science courses such as anatomy, physiology, neuroanatomy, and neurophysiology; it also includes specialized courses such as biomechanics of motion, human growth and development, and manifestations of disease and trauma.

Competition for entry to all physical therapy programs is keen. Institutions offering a physical therapy program each year receive many more applications than the number of existing places.

Many persons who want to determine whether they have the personal qualities needed for this occupation volunteer for summer or part-time work in the physical therapy department of a hospital or clinic.

Places of Employment

About two out of five jobs for physical therapists are in hospitals. Other locations of employment are in nursing homes, rehabilitation centers, schools and residential facilities for handicapped children, home health agencies, outpatient clinics, and physicians' offices.

Employment Outlook

Employment is expected to grow much faster than the average for all occupations through the mid-1990's. Most new positions will result from the expansion of programs for the aging - a need that will increase sharply.

Student Interest Code
S-I-R

POLITICAL SCIENCE (PRE)

Two years of a four-year degree program in Political Science can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

General Description

Political scientists study the manner in which people organize, administer, and operate their governing institutions. They investigate issues concerning international relations, the uses of power, and the rights and privileges of citizens. They also develop theories about political processes.

Students with a bachelor's degree find employment as business trainees, personnel assistants, and as investigators or research workers in government and industry. Graduate degrees are generally required for research, college teaching, or high level administrative positions in this field.

Career Leads

Administrative officer (federal, state, county, municipal)
Anthropologist
Archivist
Chamber of Commerce executive
Customs officer
Editor/journalist
Elections procedures advisor
Foreign correspondent
Foreign service officer
Import-export agent
Intelligence specialist
International relations specialist
Labor relations specialist
Lawyer
Market research analyst
Police officer
Political scientist
Probation/parole officer
Public relations
Public survey interviewer
Real Estate agent/broker
Research assistant (documents & records)
Social/welfare worker
Special agent (F.B.I.)
Teacher
Tour guide
Urban planner
Writer: business, trade, technical publications

Joseph Mikyska, Jr., Political Science Instructor.

Hiring Institutions

Archives
Business corporations and industries
Chambers of Commerce
Colleges, schools, and educational institutions
Courts and correctional institutions
Government agencies:
  Agency for Internal Development
  Department of State
  Information Agency
Historical societies
Import-export companies
Labor unions
Libraries
Magazines, newspapers, and periodicals
Market research departments and firms
Professional and technical journals
Public relations firms
Radio/T.V. industry
Regional planning councils and associations
Travel agencies
Social service agencies

Student Interest Code
S-I-A

PSYCHOLOGY (PRE)

Two years of a four-year degree program in Psychology can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

General Description

Psychologists study the behavior of individuals in order to understand and explain their actions. They learn about the traits and interests of people through interviews, tests and controlled experiments, and help them achieve satisfactory personal adjustments. Some of the branches of specialization in this field are clinical, social, counseling, developmental, experimental, educational, physiological, personality, and industrial psychology.

Persons with a bachelor's degree may find beginning jobs in social service agencies or business. However, a master's degree is generally the minimum requirement for professional work such as the administration and interpretation of psychological tests, or counseling students and handicapped persons. Psychologists with doctorates qualify for more responsible research and counseling positions, as well as for teaching in colleges and universities.

Career Leads

- Advertising manager
- Business/management trainee
- College/university official
- Community organization director
- Computer Programmer
- Counselor (guidance, rehabilitation, residence, vocational)
- Editor/journalist
- Efficiency engineer
- Hospital administrator
- Job analyst
- Lawyer
- Market research analyst
- Occupational therapist
- Personnel manager
- Physician
- Police officer
- Probation/parole officer
- Psychiatrist
- Psychologist (clinical, counseling, developmental, educational, engineering, experimental, industrial, school, social)
- Psychometrician
- Public relations
- Public survey worker
- Recreation director
- Social/welfare worker
- Speech pathologist/audiologist
- Statistician
- Teacher
- Teacher of handicapped, mentally retarded, learning disabilities
- Writer: business, trade, technical publications

Hiring Institutions

- Adoption and child care agencies
- Advertising agencies and departments
- Business corporations and industries
- College, schools, and educational institutions
- Community organizations: (recreation departments, YM-YWCA's, YM-YWHA's, Boy Scouts, Girl Scouts, etc.)
- Courts and correctional institutions
- Government agencies:
  - Department of Defense
  - Public Health Service
  - Veterans Administration
- Hospitals
- Research institutes
- Magazines, newspapers, and periodicals
- Market research departments and firms
- Personnel departments
- Professional and technical journals
- Public relations firms
- Test development corporations
- Social service agencies

Student Interest Code
I-S-A

RECREATIONAL LEADERSHIP (PRE)

Two years of a four-year degree program in Recreation and Park Administration can be completed at IVCC for some schools.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Participation in organized recreation is more important today than ever before as people find the amount of leisure time in their lives increasing. Recreation workers plan, organize, and direct individual and group activities that help people enjoy their leisure hours. They work with people of all ages and socioeconomic levels; the sick and the well; and the emotionally and physically handicapped. Their employment settings range from the wilderness to rural to suburban and urban, including the inner city.

A Bachelor's Degree with a major in Recreational Park Administration is rapidly becoming the entry level requirement for those seeking full-time career positions in the profession.

Places of Employment

Career positions can be found in municipal and country parks and recreation departments, state park systems, federal agencies such as the Army Corps of Engineers and the National Park Service. Many jobs for recreation workers are found in private and commercial recreation including amusement parks, sports, entertainment centers, wilderness and survival enterprises, tourist attractions, camps, health and athletic clubs and apartment complexes. The types of positions available are:

Program Specialists in dance, drama, the arts, and athletics; Recreation Center Directors; Therapeutic Recreation Specialists; Camp Directors; Interpretive Naturalists; Senior Citizen Center Directors; Park Rangers; Park Managers; Church Recreation Directors; Industrial Recreations Director; Correction Recreation Specialists; and Stadium Managers.

Employment Outlook

Employment of recreation workers is expected to grow about as fast as the average for all occupations through the mid-1990's, as people have more leisure time; as more older people use senior centers and nursing homes; and as additional recreation sites are constructed. Commercial recreation is expected to offer more favorable opportunities than either public or voluntary sectors.

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Student Interest Code
S-E-A

SOCIOLOGY (PRE)

Two years in a four-year degree program in Sociology can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois Colleges and Universities.

General Description

Sociologists study the behavior of people within social groups such as families, tribes, and communities. They analyze the patterns of social, political, religious, and business organizations and the influence of these groups on the total society. Sociologists also conduct research to discover the causes of social problems such as crime, divorce, poverty, and racism.

Students with a bachelor's degree can secure jobs as case workers, interviewers, or research assistants. Advanced degrees, however, are required for research and college teaching positions, or for administration and consulting work.

Career Leads

Administrative officer (federal, state, county, municipal)
Advertising manager
Anthropologist
Archeological assistant
Business/management trainee
College/university official
Community organization official
Counselor (guidance, rehabilitation, residence, vocational)
Editor/journalist
Hospital administrator
Labor relations specialist
Lawyer
Market research analyst
Personnel manager
Police officer
Probation/parole officer
Psychologist
Public health educator
Public relations
Public survey worker
Recreation director
Research assistant (documents and records)
Social/welfare worker
Sociologist (criminologist, penologist industrial, social ecologist)
Statistician
Teacher
Urban planner
Writer: business, trade, technical publications

Hiring Institutions

Adoption and child care agencies
Advertising agencies and departments
Business corporations and industries
Colleges, schools, and educational institutions
Community organizations (recreation departments, YM-YWCA's, YM-YWHA's, Girl Scouts, etc.)
Courts and correctional institutions
Goverment agencies
Hospitals
Labor unions
Magazines, newspapers and periodicals
Market research departments and firms
Personnel departments
Professional and technical journals
Public relations firms
Research institutes
Social service agencies

Student Interest Code
S-I-A

THEATRE (PRE)

Two years of a four-year degree program in Theatre can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universites.

Nature of the Work

Making a character come to life before an audience is a job that has glamour and fascination.

A number of actors and actresses achieve recognition on the stage, in motion pictures, or on television or radio. A larger number, well-known, experienced performers, frequently are cast in supporting roles.

New stage actors generally start in "bit" parts, where they speak only a few lines. If successful, they may progress to larger, supporting roles.

Actors who prepare for stage, screen, and television roles rehearse many hours. They must meorize their lines and know their cues.

Actors may find alternative jobs as coaches of drama or directors of stage, television, radio, or motion picture productions. They may teach in drama departments of colleges and universities.

Training

Young persons who aspire to acting careers should take part in high school and college plays, or work with little theatres and other acting groups for experience.

Aspiring young artists usually spend years in intensive training and practice before they are ready for public performances. They not only need natural talent, but also determination, a willingness to work long and hard, and an overwhelming interest in their chosen field.

Edward Krolak, (right), English Instructor and "Actor" working with students in the production of "Harvey".

About 800 colleges and universities confer bachelor's or higher degrees on students who major in dramatic and theater arts. College drama curriculums usually include courses in liberal arts, speech, pantomime, directing, playwriting, play production, and history of the drama, as well as practical courses in acting. Graduate degrees in fine arts or drama are needed for college teaching positions.

Employment Outlook

Competition will continue to be keen for jobs in the theatre, but there will be openings for those with desire and training--especially in the technical areas.

Student Interest Code
A-I-S

VETERINARY (PRE)

Two years of a Pre-Veterinary Medicine degree can be completed at IVCC.

IVCC counselors have prepared curriculum guides to assist students to select the courses required in this field at a number of four-year Illinois colleges and universities.

Nature of the Work

Veterinarians (doctors of veterinary medicine) diagnose, treat, and control diseases and injuries among animals. They help prevent the outbreak and spread of animal diseases, many of which can be transmitted to human beings.

Veterinarians treat animals in hospitals and clinics or on farms and ranches.

Veterinary medicine offers a variety of practice specialties. Over one-third of all veterinarians treat small animals or pets exclusively. About another third treat both large and small animals. A large number specialize in the health and breeding of cattle, poultry, sheep, swine, or horses. Many veterinarians inspect meat, poultry, and other foods as part of Federal and state public health programs.

Training, Other Qualifications and Advancement

All states require veterinarians to have a license. To obtain a license, applicants must have a Doctor of Veterinary Medicine (D.V.M. or V.M.D.) degree from an accredited college of veterinary medicine and pass written and oral state board proficiency examinations.

The D.V.M. or V.M.D. degree requires a minimum of six years of college consisting of a four-year professional degree program, preceded by at least two years of preveterinary study that emphasizes the physical and biological sciences.

Admission to veterinary schools is highly competitive. Each year there are many more qualified applicants than the schools can accept. Serious applicants usually need grades of "B" or better, especially in science courses. Experience in part-time or summer jobs working with animals is advantageous. Colleges usually give preference to residents of the state in which the college is located, because these schools are largely state supported.

Employment Outlook

Employment of veterinarians is expected to grow faster than the average for all occupations through the mid-1990's, primarily because of the growth in the companion animal population. However, despite the growth in employment, newly qualified veterinarians may face competition in establishing a practice in some areas due to the increasingly abundant supply of practitioners. Opportunities are presently excellent for those in some specialties such as food animal practice, toxicology, and pathology, and demand for specialists is expected to remain strong.

Student Interest Code
I-R-S

ASSOCIATE IN APPLIED SCIENCE AND CERTIFICATE PROGRAMS

TWO-YEAR ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAMS AT ILLINOIS VALLEY COMMUNITY COLLEGE

2-Yr. Programs Designed for Employment

ACCOUNTING 77

AGRIBUSINESS PRODUCTION AND MANAGEMENT 79

AGRIBUSINESS SUPPLY AND SERVICE 81

AGRIMECHANICS 83

AUTOMOTIVE MECHANICS 85

BUSINESS DATA PROCESSING 86

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CERTIFICATE PROGRAMS AT ILLINOIS VALLEY COMMUNITY COLLEGE

Less Than 2-Year Program

ACCOUNTING
BASIC 78
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WELDING 110

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ACCOUNTING

(Associate in Applied Science Degree and Certificates)

Nature of the Work

Managers must have up-to-date financial information to make important decisions. Accountants prepare and analyze financial reports that furnish this kind of information.

Three major accounting fields are public, managerial, and governmental accounting.

Related Career Areas

Many public accountants specialize in auditing. Others specialize in tax matters, such as preparing income tax forms.

Employment Outlook

Employment is expected to grow faster than the average for all occupations through the mid-1990's due to the key role these workers play in the management of all types of businesses.

Program Design

This program is designed to prepare a student for employment in the accounting field in such positions as Junior Accountant or Bookkeeper. The sequence of courses provides classroom, laboratory and practical work experiences intended to develop the occupational skills necessary for various levels of employment in the accounting field.

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
ACT 101 - Financial Accounting	3
*Math Elective	3-4
ENG 124 - Communications I	3
ECN 203 - Principles of Economics I	3
Humanities Elective	2-3
BUE 123 - Keyboarding	1
	15-17

Second Semester

ACT 102 - Managerial Accounting	3
**Programming Elective	3
BUE 222 - Business Communication	3
ECN 204 - Principles of Economics II	3
ACT 120 - Tax Accounting	3
HPR 100 - Wellness	1
	16

SECOND YEAR

First Semester

ACT 201 - Intermediate Accounting I	3
ACT 202 - Cost Accounting	3
MKT 101 - Principles of Marketing	3
BUE 201 - Business Law I	3
Elective	3
ACT 123 - Accounting on Microcomputers	1
	16

Second Semester

ACT 222 - Intermediate Accounting II	3
ACT 227 - Internship or Approved Business Elective	3
ACT 223 - Auditing	3
BUL 202 - Business Law II	3
MGT 201 - Principles of Management	3
***PC Elective	1
	16

64 Hours Required for Degree

Continued on next page

Accounting (continued)

Suggested Business Electives

ACT 221 - Non-business Accounting (3)
ACT 220 - Tax Accounting II (3)
MGT 123 - Own/Operate Small Business (3)
FIN 120 - Finance (3)
BFC 120 - Principles/Bank Operation (3)
ECN 205 - Business Statistics (3)

* Math Electives

BUE 103 - Business Mathematics (3)
MTH 100 - Fundamentals of Mathematics (3)
MTH 101 - Intermediate Algebra (3)
MTH 103 - College Algebra (3)
MTH 104 - Trigonometry (3)
MTH 106 - Finite Mathematics (4)
MTH 107 - Calculus for Business and Social Sciences (4)

**Programming Electives

CSI 101 - FORTRAN (3)
CSI 201 - COBOL (3)
CSI 204 - PL/I (3)
DP 225 - RPG (3)
PC 129 - BASIC (3)
PC 227 - PASCAL (3)

*** PC Electives

To be selected from one (1) hour Accounting, Data Base, Graphics, Spreadsheet, or Word Processing courses.

CERTIFICATES

Basic Certificate

ACT 101 - Financial Accounting
ACT 102 - Managerial Accounting
BUE 103 - Busienss Mathematics

Intermediate Certificate

ACT 120 - Tax Accounting
*ACT 201 - Intermediate Accounting
*ACT 202 - Cost Accounting

Advanced Certificate

*ACT 222 - Intermediate Accounting II
*ACT 223 - Principles of Auditing
*FIN 120 - Principles of Finance

Alice Steljis, C.P.A., accounting Instructor (left) works on a tax preparation form with a student.

*Students should be aware that second year accounting classes may be available only in the evening (ACT 201, ACT 222, ACT 223)

Student Interest Code
C-E-S

AGRIBUSINESS

PRODUCTION AND MANAGEMENT

(Associate in Applied Science)

Nature of the Work and Employment Possibilities

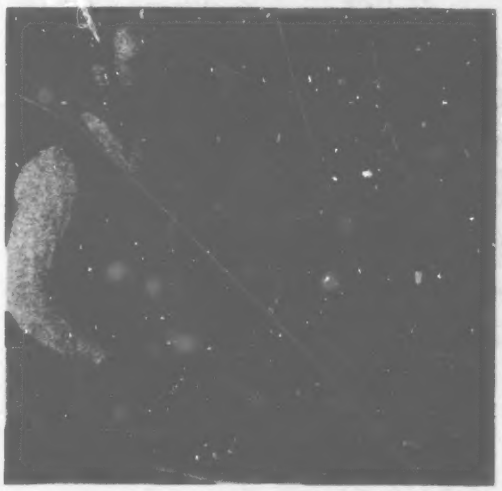
This program is designed for those students who wish to prepare themselves for the gainful occupation of farming. Job opportunities in this area primarily involve on-farm work as a paid employee of a livestock and/or crop production operator. Some of the specific jobs include those of farm operator, farm manager, farm operator-manager, farm employee, feedlot operator, and herdsman.

Program Design

Instruction includes classroom and laboratory activities as well as a supervised work experience at a selected training site. The total curriculum is designed to offer the most up-to-date education possible for providing the student with a saleable skill in one of the areas of agribusiness production and management.

Employment Outlook

Agribusiness production and management has a great diversity of employment opportunities. In Illinois alone, the farm force employed an average of 24,304 workers.



Doug Stockley, Agribusiness Instructor.

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
AGR 100 - Introduction to Field Crop Science	4
AGR 102 - Introduction to Agriculture Mechanization	4
ENG 101 - English Composition I or ENG 124 - Communications I	3
BUE 103 - Business Mathematics	3
WLD - Welding Elective	2
	16

Second Semester

AGR 101 - Introduction to Agriculture Economics	3
AGR 121 - Feeds and Feeding	3
AGR 225 - Agricultural Internship Seminar	1
ENG 102 - English Composition II or ENG 125 - Communications II	3
CHM 121 - Agricultural Chemistry I	4
Humanities Elective	1
HPR 100 - Wellness	1
HPR 101 - Wellness Lab	1
	17

SUMMER

AGR 224 - Internship	4.5

SECOND YEAR

First Semester

AGR 201 - Introductory Soil Science	4
AGR 221 - Farm Management Problems	3
AGR 222 - Agriculture Chemicals	3
ACT 121 - Fundamentals of Accounting	3
Social Science Elective	3
	16

Second Semester

AGR 103 - Animal Science (first 9 weeks)	3
AGR 224 - Internship (second 9 weeks)	4.5
AGR 226 - Agriculture Marketing & Finance (first 9 weeks)	3
	10.5

Student Interest Code
E-S-A

 Continued on next page

AGRICULTURE PRODUCTION AND MANAGEMENT CERTIFICATE

This certificate consists of 30 semester hours of specified agriculture courses and 2 to 3 semester hours of electives.

Course	Title	Sem. Hrs.
AGR 100 -	Introduction to Field Crop Science	4
AGR 101 -	Introductory Agricultural Economics	3
AGR 102 -	Introduction to Agriculture Mechanics	4
AGR 103 -	Animal Science	3
AGR 201 -	Introductory Soil Science	4
AGR 221 -	Farm Management Problems	3
AGR 222 -	Agriculture Chemicals	3
AGR 226 -	Agriculture Marketing and Finance	3
AGM 129 -	Introduction to Diesel Injection Systems	3
	TOTAL	30
	Electives	2-3
	Certificate	32-33

Two to three semester hours of electives are to be chosen from the following courses:

Electives

AGR 121 -	Feeds and Feeding	3
AGR 227 -	Livestock Selection	3
AGM 126 -	Air Conditioning	2
AGM 127 -	Agricultural Electrical Systems	2

Completion of this certificate would educate the student for employment in production agriculture. Farms and agribusinesses directly involved with farm production would be possible employers.

AGRIBUSINESS
SUPPLY AND SERVICE

(Associate in Applied Science)

Nature of the Work and Employment Possibilities

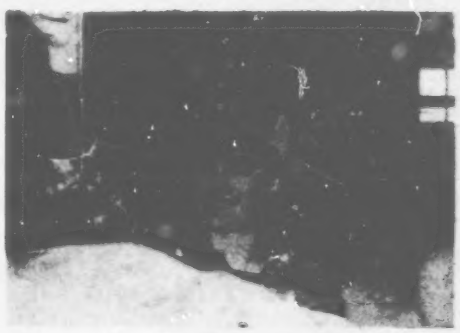
This curriculum is designed to prepare students for occupations involved in providing consumable supplies used in farming. Individuals completing the sales and service program will find a tremendous demand for their skills and services in the agriculture chemicals, feeds, fertilizers, grains, seeds and other agricultural related businesses. Jobs will be in sales, operation, and possibly management areas.

Program Design

The supply and service program consists of classroom and laboratory instruction together with a supervised work experience at a selected training site. The entire course of study is designed to give an up-to-date education, qualifying the student for gainful employment following graduation.

Employment Outlook

There is a tremendous demand for trained individuals to fill the many positions available in the field of agricultural supplies and services. Farmers purchase a greater share of their inputs today than ever before. Farm supply industries employ more than twice as many people as employed on farms. Employment opportunities have been constantly expanding.



Student Interest Code
E-C-S

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
AGR 100 - Introduction to Field Crop Science	4
AGR 102 - Introduction to Agriculture Mechanization	4
AGR 120 - Introductin to Agriculture Business	3
ENG 101 - English Composition I or ENG 124 - Communications I	3
BUE 103 - Business Mathematics	3
	17

Second Semester

AGR 101 - Introduction to Agriculture Economics	3
AGR 121 - Feeds and Feeding	3
AGR 225 - Agricultural Internship Seminar	1
CHM 121 - Agricultural Chemistry I	4
ENG 102 - English Composition II or ENG 125 - Communications II	3
Humanities Elective	1
HPR 100 - Wellness	1
HPR 101 - Wellness Lab	1
	17

Summer Session

AGR 224 - Internship	4.5

SECOND YEAR

First Semester

AGR 201 - Introductory Soil Science	4
AGR 221 - Farm Management Problems	3
AGR 222 - Agriculture Chemicals	3
ACT 121 - Fundamentals of Accounting	3
Social Science Elective	3
	16

Second Semester

AGR 103 - Animal Science (First 9 weeks)	3
AGR 223 - Agricultural Sales (First 9 weeks)	2
AGR 224 - Internship (Second 9 weeks)	4.5
	9.5

Continued on next page

AGRIBUSINESS SUPPLY & SERVICE CERTIFICATE

(Animal Science Emphasis)

This certificate consists of 30 semester hours. It is designed for completion in one year if the student desires.

Course	Title	Sem. Hrs.
AGR 101	Introductory Agriculture Economics	3
AGR 102	Introduction to Agriculture Mechanics	4
AGR 103	Animal Science	3
AGR 120	Introduction to Agriculture Business	3
AGR 121	Feeds & Feeding	3
AGR 223	Agricultural Sales	2
AGR 226	Agriculture Marketing and Finance	3
AGR 227	Livestock Selection	3
ACT 121	Fundamentals of Accounting	3
BUE 103	Business Math	3
	TOTAL	30

Completion of this certificate with an animal science emphasis would educate the student for employment by agribusinesses that supply products for livestock production. Feed and livestock equipment companies would be possible employers.

AGRIBUSINESS SUPPLY & SERVICE CERTIFICATE

(Agronomy Emphasis)

This certificate consists of 33 semester hours. It is designed for completion in one year if the student desires.

Course	Title	Sem. Hrs.
AGR 100	Introduction to Field Crop Science	4
AGR 101	Introductory Agricultural Economics	3
AGR 102	Introduction to Agriculture Mechanics	4
AGR 120	Introduction to Agriculture Business	3
AGR 201	Introductory Soil Science	4
AGR 222	Agriculture Chemicals	4
AGR 223	Agricultural Sales	2
AGR 226	Agriculture Marketing and Finance	3
ACT 121	Fundamentals of Accounting	3
BUE 103	Business Math	3
	TOTAL	33

Completion of this certificate with an agronomy emphasis would educate students for employment by agribusinesses that supply products and services for crop production. Seed and chemical companies would be possible employers.

AGRIMECHANICS

(Associate in Applied Science)

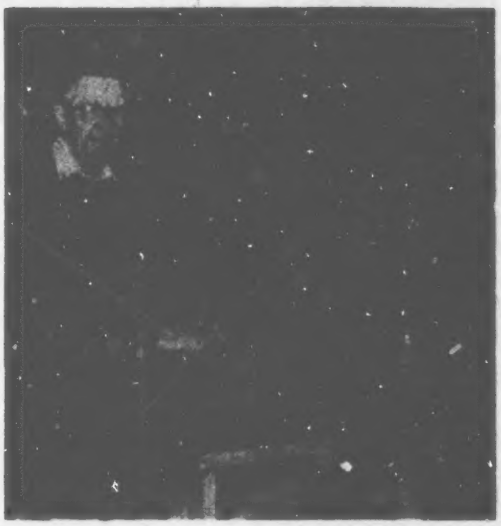
Nature of the Work

The area of agriculture mechanics is expanding to meet the challenge of agricultural mechanization by providing diversified services to members of the agriculture production and business community.

Employment Possibilities and Outlook

A qualified agriculture mechanic can expect gainful employment with farm equipment dealerships or manufacturers in diversified capacities. These opportunities include positions in such areas as parts, sales, and service with possible advancement to higher positions as shop supervisor or manager of a farm equipment dealership. This specialized training is also advantageous to actual agriculture production careers.

Because of the growing complexity of agriculture equipment in recent years, the need for qualified service technicians is greater than ever before. Skilled individuals in the agriculture mechanics field can expect numerous and rewarding career opportunities.



James Prendergast, Agrimechanics Instructor.

Program Design

This two year program is designed to give the student a working knowledge of the basic principles, methods, techniques, and repair of farm machinery. This curriculum, leading to an Associate of Applied Science Degree, will enable the graduate to secure more competitive employment opportunities in Agriculture power and equipment occupations.

Participation in two internship sessions with area agricultural businesses will provide the student with the necessary occupational experience to supplement his academic study on campus.

Larry Dalton (right) Agrimechanics Instructor.

Students are expected to purchase a basic set of mechanic hand tools. The tool list will be available from the Agrimechanics instructors.

Student Interest Code
R-I-E

Continued on next page

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
AGM 120 - Basic Gas Engines	4
AGM 121 - Hydraulics	3
ENG 101 - English Composition 1 or ENG 124 - Communications I	3
MTH 123 - Mathematics for Industry I	3
WLD 120 - Beginning Welding	2
	15

Second Semester

AGM 125 - Transmissions and Final Drive	3
AGM 126 - Air Conditioning	2
AGM 127 - Agricultural Electrical Systems	2
AGM 129 - Introduction to Diesel Injection Systems	3
AGM 220 - Advanced Engine Rebuilding	3
ENG 102 - English Composition II or ENG 125 - Communications II	3
	16

SECOND YEAR

First Semester

Course No.	Hrs. Cr.
AGM 223 - Equipment, Parts, & Sales Management (second 9 weeks)	1
AGM 227 - Electrical Sysstems Analysis (second 9 weeks)	3
AGM 228 - Diesel Injection Systems I (second 9 weeks)	2
AGM 221 - Advanced Hydraulic Analysis & Repair (second 9 weeks)	2
AGR 224 - Internship (first 9 weeks)	4.5
Humanities Electives	2
HPR 100 - Wellness	1
HPR 101 - Wellness Lab	1
	16.5

Second Semester

AGM 222 - Advanced Tractor Tune-Up & Analysis (first 9 weeks)	4
AGM 225 - Set Up & Delivery of Agri Machines (first 9 weeks)	3
AGM 229 - Diesel Injection Systems II (first 9 weeks)	2
AGR 224 - Internship (second 9 weeks)	4.5
PSY 220 - Human Relations in the World of Work	3
	16.5

AGRIMECHANICS CERTIFICATE

First Semester	Credit
MTH 123 - Mathematics for Industry	3
WLD 120 - Beginning Welding	2
AGM 120 - Basic Gas Engines	4
AGM 121 - Hydraulics	3
	12

Second Semester	Credit
AGM 125 - Transmissions - Final Drives	3
AGM 126 - Air Conditioning	2
AGM 127 - Agriculture Electrical Systems	2
AGM 129 - Introduction to Diesel Injection Systems	3
AGM 220 - Advanced Engine Rebuilding	3
	13

This certificate is designed so it may be completed in one year (two semesters). The certificate courses will give the student a working knowledge of the basic principles, methods, and techniques which are necessary for the operation, maintenance, and repair of farm machinery.

Farm or agribusiness employees should consider this certificate to increase their mechanical skills and background. Also, students wishing to explore the area of agrimechanics may wish to begin with the certificate. Later they may complete the two year program if they choose to pursue Agrimechanics as a career.

AUTOMOTIVE MECHANICS

(Associate in Applied Science)

FIRST YEAR
First Semester

Course No.	Hrs. Cr.
ATO 120-Introduction to Automotive Mechanics	1
ATO 121-Basic Gas Engines	4
ATO 122-Basic Automotive Electricity	3
MTH 123-Mathematics for Industry	3
ENG 124-Communications I	3
HPR 100-Wellness	1
HPR 101-Wellness Lab	1
	16

Second Semester

ATO 124-Power Trains and Manual Transmissions	3
ATO 125-Basic Tune-up	3
ATO 126-Steering & Suspension Systems	4
ENG 125-Communications II	3
Welding Elective	2
	15

SECOND YEAR
First Semester

ATO 220-Brake System	4
ATO 221-Advanced Tune-Up and Engine Diagnosis	4
ATO 222-Fuel Systems and Emission Controls	4
ATO 227-Auto Diesel Systems	3
Humanities Elective	1
	16

Second Semester

ATO 223-Automatic Transmissions	4
ATO 224-Automotive Accessories	3
ATO 225-Heating & Air Conditioning	3
ATO 228-Computerized Engine Controls	3
PSY 220-Human Relations in the World of Work	3
Humanities Elective	1
	17

Students are expected to purchase a basic set of mechanic hand tools. Instructors will make a tool list available.

Nature of the Work

The ability to make a quick and accurate diagnosis is one of the mechanic's most valuable skills. It requires good reasoning ability as well as a thorough knowledge of automobiles.

Employment Outlook

Job opportunities for automobile mechanics will be plentiful for persons who complete training programs at community colleges and vocational and technical schools. Employment of automobile mechanics is expected to increase faster than the average for all occupations through the mid-1990's. The growing complexity of automotive technology, particularly the use of electronics, increasingly necessitates that cars and trucks be serviced by professionals, contributing to growth in demand for automotive mechanics.

Program Design

The graduate of the associate degree program will be prepared to enter employment in engine tune-up, preventative maintenance jobs and also to work as a general automotive mechanic. This could include brake jobs, front end alignment, overhaul, partsman, and salesman.

Certificate Programs

Auto Brakes, Suspension & Alignment

Course No.	Hrs. Cr.
ATO 126-Steering & Suspension Systems	4
ATO 220-Brake Systems	4
	8

Automotive Tune-Up

ATO 122-Basic Automotive Electricity	3
ATO 125-Basic Automotive Tune-Up	3
	6

Advanced Tune-Up

ATO 221-Advanced Tune-Up and Engine Diagnosis	4
ATO 222-Fuel System and Emission Controls	4
ATO 228-Computerized Engine Controls	3
	11

Student Interest Code
R-I-E

BUSINESS DATA PROCESSING

(Associate in Applied Science)

Nature of the Work

Computers can process masses of information rapidly and accurately, but only if they are given step-by-step instructions to follow. Because the machines cannot think for themselves, computer programmers must write detailed instructions called programs that list in a logical order the steps the machine must follow to solve a problem.

Programmers usually work from problem descriptions prepared by systems analysis who have examined the problem and determined the steps necessary to achieve the desired results.

Employment Outlook

Employment of programmers is expected to grow faster than the average for all occupations through the mid-1990's as computer usage expands. The demand for applications programmers will increase as many more processes are computerized, but employment will not grow as rapidly as in the past.

Training, Other Qualifications, and Advancements

In hiring programmers, employers look for people who can think logically and are capable of exacting analytical work. The job calls for patience, persistence, and the ability to work with extreme accuracy even under pressure. Because of rapidly changing technology, programmers must continue their training by taking courses offered by their employer and software vendors.

Program Design

This curriculum, leading to an Associate in Applied Science Degree, is designed to prepare technicians for entry in businesses and industries which utilize electronic data processing operations. This curriculum is designed to prepare students for employment.

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
DP 121 - Data Processing Fundamentals	3
CSI 103 - Programming Logic	2
CSI 105 - Computers in Business	3
HUM 105 - Readings in Logic	1
*ACT 121 - Fundamentals of Accounting	3
BUE 103 - Business Math or Math Elective	3
HPR 100 - Wellness	1
	16

Second Semester

**ENG 124 - Communications I	3
DP 224 - Data Processing Applications	3
CSI 104 - Assembler Language	5
CSI 202 - Programming Systems	4
HPR 101 - Wellness Lab	1
	16

SECOND YEAR

First Semester

Course No.	Hrs. Cr.
**ENG 125 - Communications II	3
DP 220 - External Data Structures	5
CSI 203 - Advanced Programming Systems	5
PC 129 - Programming in BASIC	3
	16

Second Semester

DP 226 - Field Project	3
DP 221 - Systems Design	4
DP 222 - On-Line Applications	3
Social Science Elective	3
DP 225 - Advanced Basic & RPG or	
DP 126 - "C" Language & UNIX	3
	16

*ACT 101 may replace ACT 121
**ENG 101 and ENG 102 may replace ENG 124 and ENG 125

 Continued on next page

COMPUTER CONCEPTS FOR SMALL BUSINESS

This certificate is designed to familiarize students with both the operation and application of small computer systems. Courses in this certificate show how the small computer systems should be developed, describes how to evaluate and select computer systems, and explores th basic roles of EDP personnel and the hardware and software they work with. Also emphasized will be programming languages used in small computer installations.

Course No.		Hrs. Cr.
PC 129	- Programming in BASIC	3
DP 224	- DP Applications	3
DP 225	- RPG & Advanced BASIC	3
PC 229	- BASIC and Business Applications	3
ACT 121	- Fundamentals of Accounting	3
ACT 123	- Accounting on Microcomputers	1
		16

Student Interest Code
C-E-R

CHILD CARE

(Associate in Applied Science)

FIRST YEAR
First Semester

Course No.	Hrs. Cr.
CC 120-Introduction to Child Care	3
CC 126-Observation in Child Care Programs	1.5
CC 225-Art in Early Childhood	2
HOM 102-Family Living	3
PSY 100-General Psychology	3
PSY 201-Child Growth and Development	3
	15.5

Second Semester

CC 222-ECC: Material Development and Implementation	4
CC 227-Teaching Music in Early Childhood	2
CC 228-Literature in Early Childhood	2
HPR 104-First Aid	2
*ENG 124-Communications I	3
HOM 120-Nutrition for the Young Child	2
	15

SECOND YEAR
First Semester

CC 123-Practicum I	6
CC 121-ECC: Environment and Management	4
CC 125-Children's Health	3
*ENG 125-Communication II	3
HPR 100-Wellness	1
	17

Second Semester

CC 223-Practicum II	6
CC 220-Supervision & Administration of Child Care Programs	4
CC 224-Child Care Agencies/Laws and Licensing	2
SOC 100-Introduction to Sociology	3
HPR 103-Personal and Community Hygiene	2
	17

*ENG 101 and 102 can be substituted for ENG 124 and 125.

IMPORTANT NOTE: Completion of either PSI 100 or HIS 200, or passage of the constitution examination required by law or certified by high school transcript, is a requirement for graduation.

Nature of the Work

The role of a teacher of young children is very challenging and rewarding. Teachers of young children have a variety of responsibilities. They demonstrate an understanding of child development by providing appropriate activities and materials that foster independence and success; they plan and present learning activities to individuals and small groups; they observe and record children's behavior; they participate in the selection of equipment and materials; they work cooperatively with assistant teachers, directors and other professional personnel; and they interact with parents to provide information about the program and the child's growth and development.

Program Design

The Child Care Program is designed to help develop the professional skills necessary to become outstanding teachers through an effective combination of education and field experience. The sequence of courses provides classroom and laboratory experiences which foster understanding of children's needs and develop the occupational skills necessary to plan and develop appropriate learning activities.

Supervised Experience

Students will have the opportunity to observe and actively participate in several different early childhood settings. Students develop the ability to evaluate themselves, children and their teaching techniques so that they can provide the most well balanced, educationally sound environment possible. In the placement setting students are supervised by experienced lead teachers. The student will begin in a supportive role and gradually assume more responsibility including planning and presenting of art, music, science and other learning activities to small and large groups of children.

Continued on next page

Employment Possibilities

As the number of two working parent families and single-parent families increases the need for professionals who are knowledgeable and able to function in a variety of settings continue to expand.

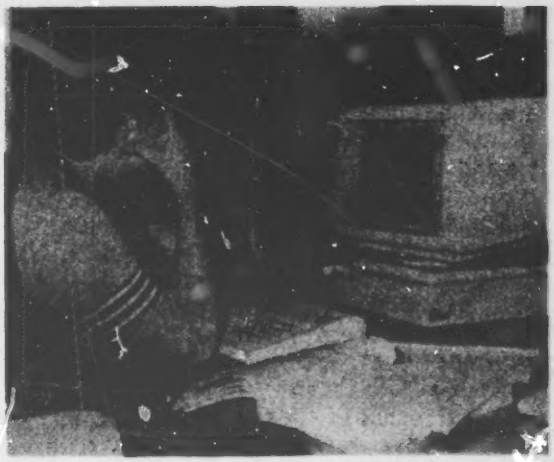
Depending on individual motivation, purpose in life and initiative, the field of child care provides a wealth of possibilities. Graduates meet the educational requirements for positions of center director (at age 21), lead teacher, assistant teacher, aide in nursery schools, day care centers and other programs serving infants, toddlers and preschoolers.

With further education an individual can pursue related careers as elementary teachers, social workers, family therapists, licensing representatives, child advocates and others.

CLERICAL
(Certificate)

Program Design

This curriculum, leading to a Certificate, is designed to prepare personnel for entry into general office positions requiring proficiency in typewriting, bookkeeping, filing, duplicating, and word processing, as well as knowledge needed for entry into clerical positions. Because clerical positions are concentrated in the fast growing finance and service industries, they are expected to grow more rapidly than the average for all occupations through the mid-1990's.



First Semester			Second Semester		
Course No.			Course No.		Hrs. Cr.
BUE 101 -	Introduction to Business	3	WPR 121 -	Transcription for Word Processing	2
BUE 103 -	Business Math	3	WPR 123 -	Advanced Text Editing	2
BUE 128 -	Typing II	2	BUE 220 -	Advanced Typing	2
WPR 120 -	Fundamentals of Office Systems	2	BUE 224 -	Office Procedures	3
ENG 124 -	Communications I	3	BUE 222 -	Business Communications	3
WPR 122 -	Word Processing Applications	2	ACT 121 -	Fundamentals of Accounting	3
		15			15

*ACT 101 may be substituted for ACT 121.

Student Interest Code

COMPUTER NUMERICAL CONTROL

(Certificates)

Nature of the Work

In order to remain competitive in a world market, manufacturers of aircraft, automobiles, machinery, and many other goods containing metal parts are using numerically controlled machines in which an electronic device controls the machine's operation. Operators and programmers of CNC (Computer Numerical Control) machines must have a broad knowledge of machining operations, mathematics, and blueprint reading. Programmers begin the task of writing a program by analyzing the blueprints. They outline the sequence of machine operations and select proper cutting tools and calculate machine speed and feed rate.

Employment Possibilities

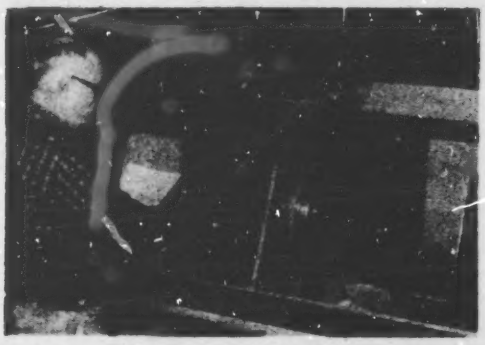
Almost all CNC operators and programmers work for manufacturing firms that produce durable goods such as aircraft, metalworking machinery, and construction equipment.

Employment Outlook

Employment of tool programmers is expected to increase much faster than the average for all occupations through the mid-1990's.

Program Design

Initially these curriculi will be offered only in the evening to provide industry with a cooperative training program in order to satisfy their labor needs. The programs will progress from basic machine tool operations to CNC operations to CNC programming.



CNC Operators Certificate

PREREQUISITES TO ENTER PROGRAM:

1. Minimum competency level for mathematics will be applied trigonometry.
2. Industrial training (must be documented) in machine tool operation, blueprint reading and/or drafting, and metallurgy.

OR Academic Credit equivalent to:

DFT 123-Mechanical Blueprint Reading or Mechanical Drafting
MT 121-Materials of Industry
MT 122-Manufacturing Processes I
MTL 120-Manufacturing Processes Lab I
MTH 104-Trigonometry
or
MTH 128-Applied Mathematics I

OR Consent of instructor.

Course No.	Hrs. Cr.
MT 123-Fundamentals of Numerical Control	2
MTL 122-Manufacturing Processes Lab III	3
CNC 120-CNC Operations I	3
CNC 122-Manual Programming	3
CNC 124-CNC Operations II	3
CNC 126-CNC Operations III	3
	17

CNC Programmers Certificate

PREREQUISITE TO ENTER PROGRAM:
CNC Operators Certificate

Course No.	Hrs. Cr.
MTH 129-Applied Mathematics II	5
CNC 220-Machine Programming I (Milling & Drilling)	4
CNC 222-Machine Programming II (Turning Center Work)	4
CNC 224-Machine Programming III (APT)	4
	17

Donald Haus, Mechanical Technology, Robotics, and C.N.C. Instructor.

COMPUTER OPERATION, COMPUTER PROGRAMMING, AND MICRO–COMPUTER

(Certificates)

Computer Operation

This certificate program is designed to equip the student to enter the Data Processing field as a computer operator.

Emphasis is placed on understanding the total operating system.

Students will have hands-on laboratory experience centering around IVCC's IBM 4331 Mainframe and related equipment.

First Semester

Course No.		Hrs. Cr.
ENG 124	- Communications I	3
DP 121	- Data Processing Fundamentals	3
DP 123	- Computer Operations I	4
ACT 121	- Fundamentals of Accounting	3
PC 129	- Programming in BASIC	3
BUE 123	- Keyboarding	1
		17

Second Semester

ACT 123	- Accounting on Microcomputers	1
ENG 125	- Communications II	3
CSI 105	- Business Organization	3
DP 124	- Computer Operations II	4
DP 225	- RPG and Advanced BASIC	3
PC Elective		1
		15

Summer Session

DP 226	- Field Project	3
WPR 122	- Word Processing Applications	2
		5

Computer Programming

The programming certificate is designed to acquaint the student with various programming languages.

Course No.		Hrs. Cr.
DP 120	- Elementary Computer Concepts	3
CSI 101	- Computer Programming	3
DP 123	- Computer Operations I	4
PC 129	- Programming in BASIC	3
DP 225	- RPG and Advanced BASIC	3
CSI 104	- Assembler Language Programming	5
		21

Microcomputer

This certificate will provide students with a working knowledge of microcomputer programming and use. Emphasis is placed upon "hands-on" instruction using IVCC's APPLE and IBM microcomputers.

Course No.		Hrs. Cr.
PC 129	- Programming in BASIC	3
PC 229	- BASIC and Business Applications	3
PC 227	- PASCAL for Problem Solving with a Microcomputer	3
PC 128	- Business Microcomputer Systems	3
		12

Student Interest Code

Computer Operation: C-E-R
Computer Programming: C-E-R
Data Entry: C-R-I
Microcomputer: C-E-R

CRIMINAL JUSTICE

(Associate in Applied Science)

Nature of the Work

The Criminal Justice Program is a broad-based curriculum which deals in general with rising crime rates and social order problems within our society. The major components of the Criminal Justice System are: police, courts, and corrections.

Employment Possibilities

Graduates of the Criminal Justice Program can obtain employment at the local, county, state, and federal level within the Criminal Justice System and in other governmental regulatory agencies. Titles of job opportunities include: patrolperson, investigator, dispatcher, probation officer, correctional officer, traffic officer, and many others. Graduates may find employment with private firms in such capacities as private detectives, private security patrolpersons and safety officers.

Employment Outlook

Will continue to grow faster than the average of other occupations in most specialties. College educated people will best be able to compete for these sought after positions. Private sector employment in protective services will continue its growth into the middle 1990's.

Certificate Program

-30 Credit Hours-

Course No.	Hrs. Cr.
CRJ 100-Introduction to Criminal Justice	3
CRJ 103-Juvenile Delinquency	3
CRJ 107-Introduction to Corrections	3
CRJ 121-Police Patrol and Service	3
CRJ 126-Administration of Justice	3
CRJ 201-Criminal Investigation	3
CRJ 202-Criminal Law	3
CRJ 203-Evidence and Criminal Procedures	3
CRJ 226-Police Community Relations	3
Criminal Justice Related Electives	3
	30

Program Design

This curriculum, leading to a one-year certificate or a two-year associate in applied science degree, is designed to prepare those students who plan to work with public and private agencies concerned with such areas as public safety, crime prevention, criminal apprehension, offender punishment, and rehabilitation. Persons employed by criminal justice agencies can also enroll and benefit from this program.

FIRST YEAR First Semester Course No.	Hrs. Cr.
CRJ 100-Introduction to Criminal Justice	3
CRJ 121-Police Patrol and Service	3
+ENG 124-Communications I	3
PSY 100-General Psychology	3
SPH 101-Fundamentals of Speech	3
	15
Second Semester	
CRJ 103-Juvenile Delinquency	3
CRJ 126-Administration of Justice	3
+ENG 125-Communications II	3
PSI 100-American National Government	3
HPR 100-Wellness	1
Approved Elective	3
	16
SECOND YEAR **First Semester**	
CRJ 201-Criminal Investigation	3
CRJ 203-Evidence and Criminal Procedures	3
PSI 102-State and Local Government	3
A-H 220-Emergency Medical Procedures	3
Approved Electives	5
	17
Second Semester	
CRJ 107-Introduction to Corrections	3
CRJ 202-Criminal Law	3
CRJ 226-Police Community Relations	3
SOC 100-Introduction to Sociology	3
Approved Electives	4
	16

+Notes: ENG 101 and 102 may be substituted for ENG 124 and 125. Students planning to transfer should take ENG 101 and 102.

Student Interest Code R-S-E

DENTAL ASSISTING

(Certificate)

Nature of the Work

Dental assistants work with dentists as they examine and treat patients. The assistant makes the patients comfortable in the dental chair, prepares them for treatment, and obtains their dental records. The assistant hands the dentists the proper instruments and materials and keeps the patient's mouth clear by using suction or other devices. Dental assistants prepare materials for making impressions and restorations and expose radiographs and process dental X-ray film as directed by the dentist.

They sterilize and disinfect instruments and equipment; prepare tray set-ups for dental procedures, provide post-operative instructions; and instruct patients in oral health practices.

Some dental assistants manage the office and arrange and confirm appointments, receive patients, keep treatment records, send bills, receive payments, and order dental supplies and materials.

The work of the dental assistant should not be confused with that of the dental hygienist, who must be licensed to scale and polish the teeth.

Places of Employment

Most dental assistants work in private dental offices, either for individual dentists or for groups of dentists. Many of the remainder work in dental schools, hospital dental departments, state and local public health departments, or private clinics. The Federal government employs dental assistants in hospitals and dental clinics of the U.S. Public Health Service and the Veterans Administration.

Employment Outlook

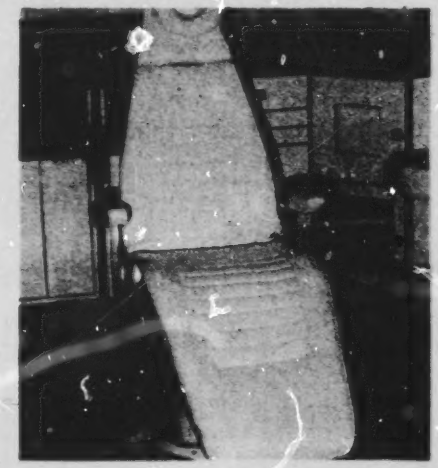
Employment of dental assistants is expected to grow faster than the average for all occupations through the mid-1990's, reflecting dentists' interest in improving their productivity as well as increased demand for dental care.

Employment opportunities for dental assistants who are graduates of academic programs in dental assisting are expected to be excellent. Part-time opportunities also will be very favorable.

Program Design

This program is designed to be completed in a one-year period. One summer session and two consecutive semesters make up the program. Clinical experience is offered in dental offices during the last semester.

High School students interested in careers as dental assistants should take courses in biology, chemistry, health, typing and office practices.



Admission to the Dental Assisting program is selective. Please contact the Admissions office or a local high school counselor for complete details concerning admission requirements and the selection procedure.

Student Interest Code
S-A-I

Continued on next page

SUMMER SESSION

Course No.	Hrs. Cr.
ENG 124 - Communications I	3
*PSY 220 - Human Relations in the World of Work	3
ZOO 120 - Human Body Structure & Function	2
	8

These must be completed with a "C" grade or above before enrolling in a DLA prefix course.

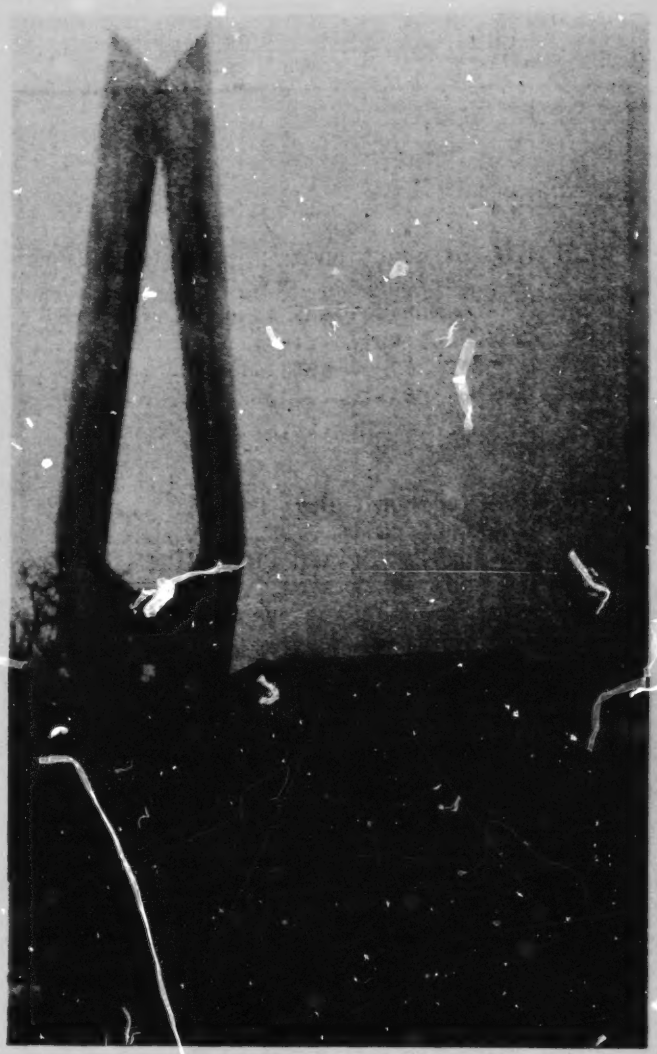
*PSY 100 may be substituted for PSY 220.

FALL SEMESTER

DLA 120 - Dental Science I	2
DLA 121 - Dental Materials & Lab Procedures	4
DLA 122 - Preventive Dentistry	2
DLA 123 - Pre-Clinical Orientation	6
DLA 124 - Dental Radiography I	2
DLA 127 - Supervised Dental Assisting Practice	1
	17

SPRING SEMESTER

DLA 125 - Dental lab Procedures	2
DLA 126 - Clinical Practice	6
DLA 128 - Dental Office Management	3
DLA 220 - Dental Science II	2
DLA 224 - Dental Radiography II	2
A-H 126 - Cardio-Pulmonary Resuscitation	1
	16



A grade of "C" or above in all courses is required for graduation from this program. If there is a course prerequisite for a second semester DLA course, one must have "C" or above for the course prerequisite: In order to take DLA 128, the student must pass BUE 107, Typing I, or pass the typing proficiency exam.

ELECTRONICS TECHNOLOGY

(Associate in Applied Science)

PREREQUISITE TO ENTER PROGRAM:
1. A Computer Language
2. Algebra I and Plane Geometry
   (Algebra II beginning Fall 1986)
3. Mathematics Placement Exam

Course No.	Hrs. Cr.
FIRST YEAR	
First Semester	
CET 120-Introduction to Microprocessor	3
*ENG 124-Communications I	3
ET 125-DC Circuits	4
MTH 128-Applied Mathematics I	5
HPR 100-Wellness	1
	16
Second Semester	
ET 122-Electronic Devices	4
ET 126-AC Circuits	3
MTH 129-Applied Mathematics II	5
PHY 120-Applied Physics I	3
	15
SECOND YEAR	
First Semester	
CET 224-Microprocessor Interfacing	4
*ENG 125-Communications II	3
ET 220-Linear Circuits	4
ET 222-Digital Circuits	4
PHY 121-Applied Physics II	3
	18
Second Semester	
ET 221-Industrial Electronics	5
ET 223-Network Analysis	4
ET 225-Shop Processes and Individual Problems in Electronics	3
PSY 220-Human Relations in the World of Work	3
Humanities Elective	1
	16

*ENG 101 and 102 may be substituted for ENG 124 and 125.

Students not having had high school algebra and geometry should consult with a counselor about taking a summer math course.

Initial placement in a sequence will be determined by previous mathematics classes completed and satisfactory score on mathematics placement test. Placement tests are required.

Students with prerequisites and a satisfactory score on mathematics placement test may elect to take MTH 105 (103 and 104), and 200 or 200 and 201.

Nature of the Work

Because of the general nature of the Electronics Technology Program, it affords the technician to work in almost all phases of business and government - from research and design to manufacturing, sales, and customer service.

Employment Possibilities

Graduates of the Electronics Technology Program are trained technicians capable of working in a great variety of different job categories. Because the field is so broad, technicians often specialize in one area such as electronic amplifiers, miniaturized electronic systems, electronic parts production, and customer service, maintenance, and repair of electronic equipment.

Employment Outlook

Employment of electronic technicians is expected to increase much faster than the average for all occupations through the mid-1990's due to increased demand for computers, communications equipment, military electronics and electronic consumer goods. Opportunities will be best for graduates of postsecondary school technical training programs.

Program Design

This curriculum, leading to an Associate of Applied Science Degree, is designed to prepare technicians to be employed in business, industry, and governmental agencies which utilize electronics operations.

FIRE SCIENCE TECHNOLOGY
(Associate in Applied Science)

NOTICE: This program is being developed for persons presently working for a Fire Department either full-time or on a volunteer basis. The program is intended to be taken by these people on a part-time basis in the evening and is not intended for the full-time day students interested in completing a degree of this nature in a two-year period.

Nature of the Work

The Fire Science Technology program is designed to provide students with the knowledge, attitude, and skills requisite for careers in the fire science field. A solid core of technical and fire related courses are offered along with a strong grouping of general education courses necessary to provide the person with good communication skills and a broad understanding of society.

Employment Possibilities

Graduates of the Fire Science Technology program can obtain employment at the local, state, and federal level within the fire related system and in related governmental regulatory agencies. Titles of job opportunities include: Firefighter, Fire Marshall, Fire Inspector & Fire Prevention Specialist.

Employment Outlook

Employment for firefighters and employees in fire-related occupations is expected to increase as fast as the average for all occupations through the 1980's to meet the growing need for fire protection.

Program Design

This curriculum, leading to a 30 credit hour certificate or a 64 credit hour A.A.S. degree, provides an avenue for those people seeking to enhance their skills sufficiently to work on a volunteer basis who want to get adequate training and preparation for entry level jobs in fire-related careers.

Certificate Program
30 Credit Hours

Course No. & Title	Cr. Hrs.
FST 120 Introduction to Fire Protection	3
FST 121 Fire Hydraulics and Equipment	3
FST 122 Hazardous Materials	3
FST 123 Fire Science Apparatus	3
FST 124 Rescue Practices	3
FST 125 Fire Suppression	3
FST 220 Fire Administration	3
FST 221 Fire Prevention	3
FST 222 Building Construction	3
FST 223 Fire Fighting Tactics	3

A.A.S. Degree Program Requirements
64 Credit Hours

1. Successful completion of the 30 credit hour courses making up the Fire Science Technology Certificate.

2. Successful completion of 6 credit hours in Communications ENG 124 and ENG 125 or ENG 101 and ENG 102. SPH 101 may be substituted for ENG 125 or ENG 102.

3. Successful completion of 6 credit hours of Social Science courses. Recommended: PSY 220 and PSI 102. PSY 100 may be substituted for PSY 220.

4. Successful completion of 9 credit hours in Science and Mathematics courses. Recommended:
A-H 220 Emergency Medical Proced.
CHM 100 Introduction to Chemistry
PSC 100 Intro. to Physical Science

A-H 221 may be substituted for A-H 220.

5. Successful completion of 3 credit hours in Humanities. Choose one course from the list below:

ART 100, FEN 100, GER 100, SPN 100, MUS 100, PHL 100, HIS 100. Substitutions may be approved - check with Counselor or Social Sciences Division Chairperson.

6. Successful completion of 2 credit hours in Wellness & Health. Wellness courses being developed for the College.

7. Successful completion of 5 credit hours in Elective courses.

8. Successful completion of MGT 222, Principles of Supervision, or an appropriate substitute as approved by the Social Science Division Chairperson.

*Flexibility in course selection can be considered. Please see the Social Science Division Chairperson for prior approval in substitution courses.

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INDUSTRIAL ELECTRICIANS

(Certificate)

Nature of the work

To install service and maintain electrical equipment used in industrial plant manufacturing processes.

Employment Possibilities

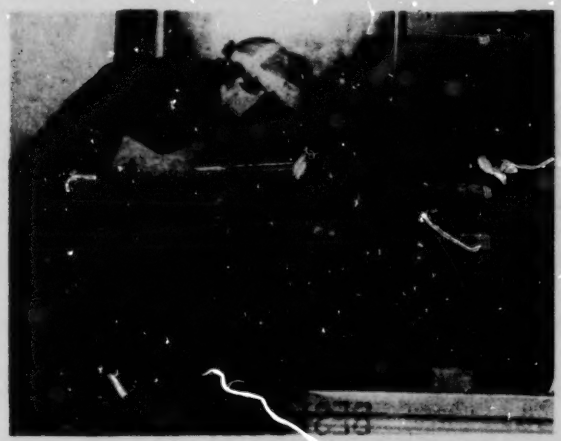
Many industrial plants in the area have upgraded or have plans to upgrade their manufacturing process controls. People with the skills and knowledge necessary to work with this equipment have an advantage when these jobs become available.

Employment Outlook

As with all employment at the present time, we could hope for a better situation, but if and when the overall employment situation improves, people with these skills and knowledge will be first in demand.

Program Design

The program is a four year (eight semester) program requiring attendance two evenings a week. It covers basic electricity, schematic reading, electric motors, motor control devices and circuits. It is presently in the process of being upgraded to include microprocessor based control systems.



FIRST YEAR
First Semester

ELE 120-Basic Industrial Electricity I..... 4

Second Semester

ELE 121-Basic Industrial Electricity II..... 4

SECOND YEAR
First Semester

ELE 122-Electrical Machines I..... 2.5
ELE 124-Electrical Schematic Reading I..... 2.5

Second Semester

ELE 123-Electrical Machines II..... 2.5
ELE 125-Electrical Schematic Reading II..... 2.5

THIRD YEAR
First Semester

ET 120-Beginning Electronics..... 2.5
IM 122-Introduction to Electro-Mechanics..... 2

Second Semester

ET 123-Applied Industrial Electronics..... 2.5
ELE 126-Electrical Troubleshooting 2

FOURTH YEAR
First Semester

IM 221-Control Instrumentation.... 4

Second Semester

Electives-Choose from: 4
35

MT 224-Fluid power..... 4
WLD-Welding Elective..... 2 or 4
IM 120-Equipment Maintenance I 2
IM 121-Equipment Maintenance II 2
GNT 110-Microprocessors..... Variable

MARKETING

(Associate in Applied Science)

Nature of the Work

Marketing graduates use the broad, general business knowledge they have attained to secure entry level supervisory positions in retailing, wholesaling, and related areas of marketing and sales.

Related Job Titles

Marketing graduates qualify for positions such as sales representative, floor supervisor, manager trainee, and department manager. Students with the Marketing degree and appropriate work experience may secure positions such as store manager, personnel manager, or operations manager in retail and wholesale firms. Graduates may also use the degree to enter the fields of insurance, finance, banking, and real estate.

Employment Outlook

Employment in opportunities for marketing graduates are expected to rise about as fast as the average for all occupations through the mid-1990's.

Program Design

Full time students may complete the Marketing degree program in two years. Students wishing to attend part time will find the complete course offerings of the Marketing program available in the evening. Completion time for part time students will vary dependent upon the number of courses taken per semester.

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
BUE 101 - Introduction to Business	3
BUE 103 - Business Mathematics	3
MKT 101 - Principles of Marketing	3
*Math or Science Elective	3-5
ENG 124 - Communications I	3
BUE 123 - Keyboarding	1
	16-18

Second Semester

MKT 122 - Salesmanship	3
ACT 121 - Fundamentals of Accounting	3
*Humanities Elective	1-3
*CSI/DP/PC Elective	3
ENG 125 - Communications II	3
HPR 100 - Wellness	1
	14-16

SECOND YEAR

First Semester

MKT 221 - Advertising	3
BUL 201 - Business Law I	3
ECN 203 - Principles of Economics I	3
MKT 227 - Marketing Internship	3
PSY 220 or SPH 101	3
*PC Elective	1
	16

Second Semester

MKT 223 - Retailing	3
MKT 228 - Marketing Internship	3
BUL 202 - Business Law II	3
MGT 201 - Principles of Management	3
ECN 204 - Principles of Economics	3
*PC Elective	1
	16

ENG 101 and 102 may be substituted for ENG 124 and 125.

ACT 101 may be substituted for ACT 121.

64 semester hours required for degree.

* ELECTIVES:

Math/Science: Any 3 to 5 hour course in math or science meeting the requirements of the A.A.S. degree. See page 38 of catalog.

Humanities: Any 1 to 3 hour course in the humanities area meeting the requirements of the A.A.S. degree. See page 38 of catalog.

CS /DP/PC: Any 3 hour computer science, data processing or personal computing course.

PC Elective: Students will select PC electives from the one (1) hour PC course offerings in Data Base, Spreadsheets, Word Processing, etc. See Personal Computing, Open entry, Open exit, Self-paced courses.

MECHANICAL ENGINEERING TECHNOLOGY

(Associate in Applied Science)

Nature of the Work

Mechanical Engineering technicians apply theory and prinicipies of mechanical engineering to develop and test machinery and equipment under direction of engineering staff and physical scientists. Machine designers are increasingly using computer-aided design systems which greatly increase their productivity.

Employment Possibilities

Although the Mechanical Engineering technician generally works on the design and testing of mechanical systems and products, the draftsman usually specializes in a particular field of work, such as mechanical, electrical, aeronautical, structural, or architectural.

Employment Outlook

The projected growth (1982-1995) for Mechanical Engineering technicians is expected to be much faster than the average. Little change in employment of drafters is expected through the mid-1990's due primarily to the widespread use of computer-aided design equipment. Training on a CAD/CAM system is a must for future employment in an engineering department.

Program Design

This curriculum, leading to an Associate in Applied Science Degree, is designed to prepare design technicians to work with engineers on product design and development. The objective of this program is to provide the technician with knowledge and skills needed for successful employment in an mechanical engineering department.

PREREQUISITE TO ENTER PROGRAM:
1. Algebra I and Plane Geometry (Algebra II beginning Fall 1986)
2. Mathematics Placement Exam

FIRST YEAR First Semester	
Course No.	Hrs. Cr.
DFM 120-Mechanical Drafting I...	.5
DFM 121-Mechanical Drafting II..	1
DFM 122-Mechanical Drafting III	.5
DFM 123-Mechanical Drafting IV..	1
MT 121-Materials of Industry...	3
***Machine Tool Option.....	3
*Mathematics.....	5
**ENG 124-Communications I.....	3
	17
Second Semester	
PHY 120-Applied Physics.....	3
DFT 121-Advanced Mechanical Drafting.....	3
EDT 128-Statics and Strength of Materials.....	5
*Mathematics.....	5
HPR 100-Wellness.....	1
	17
SECOND YEAR First Semester	
PHY 121-Applied Physics II.....	3
EDT 220-Machine Design I.....	4
EDT 224-Mechanisms.....	4
EDT 225-Computer Aided Engineering.....	3
**ENG 125-Communications II.....	3
	17
Second Semester	
EDT 221-Machine Design II.....	3
EDT 227-Computer Aided Design I	3
****EDT 226-Design Technician Internship.....	4
PSY 220- Human Relations in the World of Work.....	3
Humanities Elective.....	1
	14

*Mathematics: Initial placement in a and MTL 121, or MET 122.

**ENG 101 AND 102 may be substituted for ENG 124 and 125.

***Machine Tool Option: Three semester hours minimum. MT 122

****If an internship is unavailable, EDT 228-Design Projects, will be required.

MECHANICAL TECHNOLOGY/ROBOTIC APPLICATIONS PROGRAM

OPTION TO MECHANICAL TECHNOLOGY PROGRAM

(Associate in Applied Science)

Nature of the Work

With a knowledge of manufacturing processes methods, quality control and processing along with an understanding of robots and their controls, an individual, as part of a team, would be involved with defining the task of the robot work cell and develop a plan of implementing the robot work cell. This would include contingency planning, safety, industrial relations and economic considerations.

Employment Possibilities

As a technician, an individual would work with industrial and manufacturing engineering to define, implement and evaluate robot work cell applications.

Employment Outlook

It is a known fact that this nations labor force is decreasing. Competition in the market is becoming more intense and direct labor costs are increasing. With these conditions set, the use of robots and the need for people with an understanding of robot applications will increase greatly from now to the end of the century.

* Mathematics: Five semester hours minimum. Minimum competency level will be applied trigonometry. This level may be reached by following either of the two sequences listed below. Initial placement in a sequence will be determined by previous mathematics classes completed and satisfactory score on mathematics placement tests.

MTH 128, MTH 129 or MTH 103, MTH 104 (MTH 105). Students electing the MTH 103, 104 sequence must complete five (5) semester hours of electives to earn a minimum of 65 semester hours.

**ENG 101 and 102 may be substituted for ENG 124 and 125.

PREREQUISITE TO ENTER PROGRAM:
1. Algebra I and Plane Geometry (Algebra II beginning Fall 1986)
2. Mathematics Placement Exam

FIRST YEAR
First Semester

Course No.	Hrs. Cr.
RBA 120-Introduction to Robotics	3
PC 129-Programming in BASIC	3
MT 120-Industrial Electricity	4
*Mathematics	5
HPR 100-Wellness	1
	16

Second Semester

DFT 123-Mechanical Blueprint Reading	3
MT 122-Manufacturing Processes I	2
MTL 121-Manufacturing Processes Lab II	1
PHY 120-Applied Physics I	3
**ENG 124-Communications I	3
*Mathematics	5
	17

SECOND YEAR
First Semester

MT 220-Method and Operation Analysis	4
MT 221-Statistics and Quality Control	3
MT 123-Fundamentals of Numerical Control	2
MTL 123-Manufacturing Processes Lab IV	1
PHY 121-Applied Physics II	3
**ENG 125-Communications II	3
Humanities Elective	1
	17

Second Semester

MT 223-Process Planning	4
MT 224-Introduction to Fluid Power	4
PSY 220-Human Relations in the World of Work	3
RBA 222-Robot Applications Field Project	4
	15

MICROPROCESSOR/COMPUTER TECHNOLOGY PROGRAM

OPTION TO ELECTRONICS TECHNOLOGY PROGRAM

(Associate in Applied Science)

Nature of the Work

Microprocessor/computer technology involves the design, development, manufacture, and servicing of digital electronics equipment and systems.

Employment Possibilities

Graduates of the Electronics Technology/Microprocessor Option program are trained technicians capable of working in a variety of job categories. The technician will specialize in one area such as automatic control systems, computer systems, digital communications systems, or become involved in the installation and/or maintenance of complex equipment.

Employment Outlook

Employment as a computer service technician is expected to grow much faster than the average for all occupations through the mid-1990's. As the Nation's economy expands, more computer equipment will be used, and more technicians will be needed to install and maintain it.

Program Design

A solid, basic background in digital electronics is an integral part of this program.

PREREQUISITE TO ENTER PROGRAM:

1. A Computer Language
2. Algebra I and Plane Geometry
   (Algebra II beginning Fall 1986)
3. Mathematics Placement Exam

Course No.	Hrs. Cr.
FIRST YEAR	
First Semester	
CET 120-Introduction to Microprocessor	3
CSI 103-Programming Logic	2
ET 125-DC Circuits	4
MTH 128-Applied Mathematics I	5
Humanities Elective	1
	15
Second Semester	
ET 122-Electronics Devices	4
ET 126-AC Circuits	3
MTH 129-Applied Mathematics II	5
PHY 120-Applied Physics I	3
	15
SECOND YEAR	
First Semester	
CET 224-Microprocessor Interfacing	4
ET 220-Linear Circuits	4
ET 222-Digital Circuits	4
PHY 121-Applied Physics II	3
*ENG 124-Communications I	3
	18
Second Semester	
CET 221-Motion and Process Control	5
CET 226-Microprocessor Systems	5
*ENG 125-Communications II	3
PSY 220-Human Relations in the World of Work	3
HPR 100-Wellness	1
	17

*ENG 101 and 102 may be substituted for ENG 124 and 125. English may be moved to the second and third semester to allow room for more advanced electronics in the fourth semester.

Students not having had high school algebra and geometry should consult with a counselor about taking a summer math course.

Initial placement in a sequence will be determined by previous mathematics classes completed and satisfactory score on mathematics placement test. Placement tests are required.

Students with prerequisites and a satisfactory score on the mathematics placement test may elect to take MTH 105,(103 and 104), and 200 or 200 and 201.

MID–MANAGEMENT

(Associate in Applied Science)

Nature of the Work

Individuals pursuing the AAS Mid-Management program may find employment in a variety of business activities such as finance, data processing, health care organizations, marketing, and manufacturing.

Employment Possibilities

Upon completion of the AAS Mid-Management degree, individuals may secure positions such as manager trainee, insurance trainee, personnel assistant, floor supervisor and production assistant.

Employment Outlook

Due to the broad nature of this program, employment possibilities are excellent both locally and nationally. Employment of mid-managers is expected to grow slightly faster than the average for all occupations through the mid-1990's.

Program Design

Individuals may either enroll as full time day or part time evening students. Courses will be available in both sequences. The full time day student may complete the program in four semesters. The part time evening student will probably require six or more semesters for completion. People presently working in a business-related occupation may wish to complete this degree program to enhance their opportunities for advancement.

First Semester

Course No.	Hrs. Cr.
BUE 103 - Business Math or ACT 121 or ACT 101	3
ECN 203 - Principles of Economics I	3
*CSI/DP/PC Elective	3
*Math or Science Elective	3-5
ENG 124 - Communications I	3
BUE 123 - Keyboarding	1
	16-18

Second Semester

ACT 121 - Fundamentals of Accounting or ACT 101 or ACT 102	3
ECN 204 - Principles of Economics II	3
MKT 101 - Principles of Marketing	3
*Humanities Elective	1-3
ENG 125 - Communications II	3
HPR 100 - Wellness	1
	14-16

Third Semester

BUL 201 - Business Law I	3
MGT 201 - Principles of Management	3
Business Electives	6
General Elective	3
*PC Elective	1
	16

Fourth Semester

BUL 202 - Business Law II	3
MGT 123 - Owning and Operating a Small Business	3
FIN 120 - Principles of Finance	3
Business Electives	6
*PC Elective	1
	16

64 semester hours required for degree.

Student Interest Code
E-S-C

Continued on next page

* ELECTIVES:

Math/Science: Any 3 to 5 hour course in math or science meeting the requirements of the A.A.S. degree.
See page of catalog.

Humanities: Any 1 to 3 hour course in the humanities area meeting the requirements of the A.A.S. degree.
See page of catalog.

CSI/DP/PC: Any 3 hour computer science, data processing or personal computing course.

PC Elective: Students will select PC electives from the one (1) hour PC course offerings in Data Base, Spreadsheets, Word Processing, etc. See Personal Computing, Open entry, Open exit, Self-paced courses.

Business Electives are to be selected from the groups below and must include a minimum of 6 credit hours from any one group. Students should be aware that many electives listed below will be offered only in the evening.

GROUP A

ACT 120 - Tax Accounting 3
ACT 201 - Intermediate Accounting I 3
ACT 202 - Cost Accounting 3
ACT 220 - Accounting for Non-Profit Organizations 3
ACT 222 - Intermediate Accounting II 3

GROUP B

MGT 221 - Personnel Management . . 3
MGT 222 - Principles of Supervision 3
PSY 220 - Psychology of Human Relations 3

GROUP C

BFC 120 - Principles of Bank Operations 3
BFC 121 - Installment Credit . . . 3
ECN 220 - Money and Banking . . . 3
BFC 122 - Introduction to Commercial Lending . . . 3
BFC 123 - Bank Investments 3
BFC 124 - Analyzing Financial Statements 3

GROUP D

INS 120 - Principles of Insurance 3
INS 121 - Life and Health Insurance 3
INS 122 - Property and Casualty Insurance 3

GROUP E

Any computer Science, Data Processing, or Personal Computing course of three (3) or more hours will count toward this group once the first semester CSI/DP/PC elective requirement has been met.

GROUP F

RE 120 - Real Estate Transactions 2
RE 121 - Contracts and Conveyancing 1
RE 122 - Real Estate Principles 1
RE 123 - Real Estate Appraisal . 1
RE 124 - Property Management . . 1
RE 125 - Financing 1

PROFESSIONAL NURSING

(General Information)

REGISTERED NURSES are members of the health care profession who help to serve society's interests and needs in the area of health. They focus on the individual and the family unit. Registered nurses are prepared to assess an individual's needs, plan, and intervene to meet those needs with appropriate nursing actions or with prescribed medical treatment.

Additional educational preparation provides the nurse with many and varied opportunities for career advancement in the nursing profession.

NURSING ASSISTANTS provide supportive services to patients under the direction of the professional nursing staff. These services may include bathing, feeding, and assisting with the usual activities of daily living for the patients.

APPLICATION, SELECTION AND ADMISSION FOR NURSING PROGRAMS

1. A currently enrolled student must file a Letter-of-Intent in the Admissions Office between the September 15 and January 1 prior to the Fall semester in which the applicant would expect to enroll in the first Nursing course (NUR prefix). New students must submit an Application for Admission in accordance with the same date parameters.

2. After January 1, status letters will be sent to all applicants confirming the program for which they will be evaluated, and advising as to what materials (if any) are needed to complete the admission file.

3. Minimum standards for admission are the following:
   A. High School or College transcript, as applicable, must indicate a minimum cumulative average of "C+" (2.5 on a 4.0 scale) for all work attempted.
   B. Applicants who hold the High School Equivalent Certificate must have a minimum score of 50 on each of the five tests.
   C. Applicants are to have completed two years of high school lab science, or two semesters of college lab science, or one year of high school lab science and one semester of college lab science with at least a grade of "C". Persons who have taken one or more lab science courses eight or more years ago must demonstrate proficiency in science by successfully completing one semester of a laboratory course. Lab courses in Chemistry, Biology, Physics, Anatomy, Physiology, Microbiology, Zoology, and IVCC's CHM 100 will fulfill the requirement. A combination of Biology and Chemistry is preferred.
   D. In those years when there are more qualified applicants than spaces available in the program, admission is competitive and selective by use of an objective formula approved by the nursing department.
   E. All nursing students must be certified in Cardiopulmonary Resuscitation and maintain that certification throughout the nursing program. A-H 126 will meet this requirement.

4. There are additional requirements for admission; see the Director of Admissions or a counselor for complete information regarding admission to the Nursing Program.

REGISTERED NURSE

(Associate in Applied Science)

Nature of the Work

Registered nurses work in a variety of health care settings: hospitals, nursing homes and long term care facilities, home health agencies, doctor's offices or clinics, and industry. The Associate Degree Graduate Nurse (ADN) is prepared to function as a staff nurse. With work experience and additional education, the ADN can expand her employment opportunities to specialty clinical areas such as cardiac care, intensive care, trauma; community health, school nursing, nursing education, or independent practice.

Employment Opportunities

Most registered nurses are employed in hospitals, however, with the changing trends in the health care delivery system and the increased life span, home health agencies, clinics, nursing homes and long term care facilities are offering more opportunities for nurses.

Program Design

The Associate Degree Nursing Program at Illinois Valley Community College qualifies the graduate to take the State Board Examination for licensure in Illinois as a registered professional nurse. The nursing program at Illinois Valley Community College is fully accredited by the National League for Nursing.

The curriculum consists of nursing and support courses from other disciplines. The nursing courses include classes at the college and a variety of experiences in the local hospitals and community health agencies.

See Admission and Selection Process criteria for this program, page 105.

Retention, Readmission, and Promotion

Retention, readmission, and promotion are based upon:

1. Physical and emotional aptitude for nursing.
2. Academic achievement (a grade of "C" or above in Nursing and Allied Health courses, Zoology 107 and 108, and a final cumulative GPA of 2.0 or above is required for promotion and graduation.)
3. Continuance in the Nursing sequence: a student who withdraws from the nursing course sequence at any time will be subject to curriculum revision.
4. Readmission to the program following an absence of more than three years is subject to review by the Director of Nursing.
5. All nursing students who are promoted or proficiency from one semester of nursing courses to another, must have their schedules approved by the Director of Nursing prior to registration. These students should first see a counselor concerning course selection.
6. Students are expected to abide by the "Nursing Student Handbook" given to them the first week of classes.
7. Current CPR Certification is required throughout the nursing program. A-H 126 Cardiopulmonary Resuscitation will meet this requirement.

All non-nursing courses must be taken prior to or concurrently with the nursing courses with which they are listed in the curriculum pattern. Although the program is designed to be completed in four semesters, many students find it advisable to complete at least six hours of the general education requirements prior to enrollment in Nursing 121.*

*Counselors will advise regarding other options if a student is unable to complete the program in the two year time period.

Student Interest Code
S-A-I

Continued on next page

ASSOCIATE IN APPLIED SCIENCE DEGREE IN NURSING

Course No.	Hrs. Cr.
First Semester	
NUR 121 - Fundamentals of Nursing I	3
NUR 122 - Fundamentals of Nursing II	3
NUR 123 - Theories and Concepts Basic to Nursing	2
A-H 120 - Introduction to Health Science	3
A-H 122 - Human Growth and Development for Health Workers	3
ZOO 107 - Anatomy and Physiology I	4
	18
Second Semester	
NUR 124 - Nursing Care of Children	3
NUR 125 - Nursing Care of the Childbearing Family	3
ZOO 108 - Anatomy and Physiology II	4
PSY 100 - General Psychology	3
SOC 100 - Introduction to Sociology	3
	16

Course No.	Hrs. Cr.
Third Semester	
NUR 220 - Holistic Physical and Mental Nursing I	5
NUR 221 - Holistic Physical and Mental Nursing II	5
ENG 101 - English Composition I	3
Humanities Elective	3
	16
Fourth Semester	
NUR 222 - Holistic Physical and Mental Nursing III	5
NUR 223 - Holistic Physical and Mental Nursing IV	5
NUR 224 - Issues in Professional Nursing	2
*ENG 102 - English Composition II	3
	15

*SPH 101 may be substituted for ENG 102. To meet the general education requirement, nursing students must take a 3-hour transferrable Humanities course.

Since the concepts of health and wellness presented in the nursing program are similar to those in the course HPR 100 - Wellness, students completing the Associate in Applied Science Degree in Nursing are exempt from the Health, Physical Education, and Recreation requirement of the Associate of Applied Science Degree.

NURSE ASSISTANT

(Nursing Aides, Orderlies and Attendants)
(Certificate)

Nature of the Work

The Nursing Assistant performs a variety of supportive duties to care for sick and injured people such as: answer the patients' bell calls, deliver messages, serve meals, feed patients who are unable to feed themselves, make beds, and bathe and dress patients. Nursing assistants work under the direction and supervision of the registered or licensed practical nurse.

Employment Possibilities

Graduates of the Nursing Assistant program would qualify for employment opportunities with the following titles: Orderly, Nursing Aide, Nursing Attendant, Hospital Attendant, Auxiliary Nursing Worker, Geriatric Aide, and Psychiatric Aide (in mental institutions).

The program meets the requirements and guidelines for recognition and approval by the State of Illinois Department of Public Health for certification.

Employment Outlook

Employment opportunities continue to exist especially in nursing homes and home health agencies.

Admission to the program on this page does not follow the same calendar as other degree and certificate programs. Starting dates will be announced in area newspapers two or three times a year.

A grade of "C" or better is required in all courses to receive the certificate.

Program Design

The Nursing Assistant Curriculum will consist of a 5 credit hour Certificate Program. The two courses making up the 5 credit hours will both be offered in the same semester to allow the student to complete the program within that semester. People that are presently working as Nursing Aides without formal educational training may enroll for the program.

Course No.		Hrs. Cr.
A-H 124 -	Basic Nursing Concepts and Skills	. . 4
A-H 125 -	Supervised Practice	. . 1
		5

Student Interest Code
S-A-I

LICENSED PRACTICAL NURSE CERTIFICATE

Because of the decreased economic opportunities for the Licensed Practical Nurse, the Licensed Practical Nurse Certificate will not be offered for a period of two years, beginning the Fall Semester of 1985. After this period, an evaluation of need will be made to determine if the suspension is to continue or if the certificate will be reinstated.

SECRETARIAL SCIENCE

(Associate in Applied Science)

Nature of the Work

The efficiency of any organization depends upon secretaries and stenographers, who are the center of communications within their firm. They transmit information to the staff and to persons in other organizations. Although most secretaries type, take shorthand, and deal with callers, the time spent on these duties varies in different types of organizations.

In offices where dictation and typing are handled in word processing centers, administrative secretaries handle all other secretarial duties.

Training, Other Qualifications and Advancement

Many employers prefer applicants who have additional secretarial training at a college. A knowledge of spelling punctuation, and grammar and a good vocabulary are essential. Employers look for persons who are poised and alert, and who have pleasant personalities.

Employment Outlook

Employment of secretaries is expected to increase about as fast as the average for all occupations through the mid-1990's due to the steadily growing need to process information.

Program Design

This curriculum, leading to an Associate in Applied Science Degree, is designed to provide a high degree of communications, typing, shorthand, and word processing skills.

This comprehensive program will give students the option to work in these specialized areas during the internship phase of the program.

Course No.		Hrs. Cr.
FIRST YEAR		
First Semester		
BUE 101	Introduction to Business	3
BUE 103	Business Mathematics	3
BUE 125	Shorthand I	4
ENG 101	English Composition	3
WPR 120	Fundamentals of Office Systems	2
HPR 100	Wellness	1
		16
Second Semester		
BUE 126	Shorthand II	4
BUE 128	Typewriting II	2
BUE 222	Business Communications	3
*ACT 121	Fundamentals of Accounting	3
WPR 122	Word Processing Applications	2
SPH 101	Fundamentals of Speech	3
		17
SECOND YEAR		
First Semester		
BUE 220	Advanced Typewriting	2
BUE 224	Office Procedures & Administration	3
BUE 227	Secretarial Internship	3
PC 129	Programming in BASIC	3
WPR 121	Word Processing I	2
WPR 123	Advanced Text Editing	2
		15
Second Semester		
ECN 203	Principles of Economics I	3
BUE 228	Professional Typing or	
WPR 124	Records Processing and File Design or	
WPR 125	Information Processing	2
BUL 201	Business Law I	3
MGT 201	Principles of Management	3
BUE 229	Secretarial Internship	3
Humanities Elective		2
		16

*ACT 101 may be substituted for ACT 121

Student Interest Code
C-S-A

WELDING
(Certificate)

Nature of the Work

Welding consists of joining pieces of material, usually metal, by fusing or binding them together. It is the most common method of permanently connecting metal parts that go into the construction of automobile, spacecrafts, ships, household appliances, construction of equipment, and thousands of other products.

Employment Outlook

Employment of welders is expected to increase as fast as the average for all occupations through the mid-1990's. Some of this growth will reflect a rebound of employment to the levels before the 1981-82 recession. Many of the unemployed workers are skilled and form a pool of potential reentrants who will resume working as jobs become available. Those seeking a first job may encounter considerable competition from experienced welders.

Program Design

This curriculum, leading to a Certificate, is designed to provide a broad background of technical knowledge plus a high degree of skill development in the area of Welding. This will include both knowledge about and experience in the welding of various metals and layout and development of weldments. Graduates will be qualified for jobs in construction, production, job shops and others. Students are required to follow qualifications and procedure standards outlined in the American Welding Society D1.1 and A.S.M.E. Pressure Vessel Code.

Students enrolled in the Welding Certificate Program will enroll concurrently in the corresponding welding qualification course(s).

After completion of enrolled course(s) a student may enroll in additional welding course(s) during the semester.

Initial placement in welding courses will be made according to welding education and experience. Welding qualification testing may be necessary to confirm welding ability and determine initial placement.

36.5 Semester Hour Certificate

First Semester	
Course No.	Hrs. Cr.
*Welding Electives	6
WDT 120-Welding Theory I	1
MET 129-Welding Metallurgy	3
DFT 127-Welding Blueprint Reading	3
MTH 123-Mathematics for Industry	3
**Welding Qualifications Tests	2.25
	18.25
Second Semester	
*Welding Electives	6
WDT 121-Welding Theory II	1
ENG 125-Communications II	3
DFT 128-Development and Layout for Welders	3
***Machine Tool Option	3
**Welding Qualification Tests	2.25
	18.25

*Welding Electives: Listed on next page.

**Welding Qualification Tests: Listed on next page.

***Machine Tool Option: Three semester hours minimum. MT 122 and MTL 121, MET 101 or MET 122.

Continued on next page

Welding (continued)

*Welding Electives

WLD 120-Stick, Plate, Flat Position... 2
WLD 121-Stick, Plate, Horizontal Positions..... 2
WLD 122-Stick, Plate, Vertical-up..... 2
WLD 123-Stick, Plate, Verical-down.... 2
WLD 124-Stick, Plate, Overhead..... 2
WLD 125-TIG,(HELIARC) Plate, Flat..... 2
WLD 126-TIG,(HELIARC) Plate,Horizontal 2
WLD 127-TIG,(HELIARC) Plate, Vertical 2
WLD 128-TIG,(HELIARC) Plate, Overhead 2
WLD 129-MIG,(WIRE) Plate, Flat..... 2
WLD 220-MIG,(WIRE) Plate, Horizontal.. 2
WLD 221-MIG,(WIRE) Plate, Vertical.... 2
WLD 222-MIG,(WIRE) Plate, Overhead.... 2
WLD 223-Stick, Pipe..... 2
WLD 224-TIG,(HELIARC) Pipe..... 2
WLD 225-MIG,(WIRE) Pipe..... 2
WLD 226-Gas welding and brazing, flat and horizontal..... 2
WLD 227-Gas welding and brazing, vertical and overhead..... 2

John Zoka (right), Welding Instructor.

**Welding Qualification Test

WQT 120-AWS Qualif. Test for WLD120 3/4
WQT 121-AWS Qualif. Test for WLD121 3/4
WQT 122-AWS Qualif. Test for WLD122 3/4
WQT 123-AWS Qualif. Test for WLD123 3/4
WQT 124-AWS Qualif. Test for WLD124 3/4
WQT 125-AWS Qualif. Test for WLD125 3/4
WQT 126-AWS Qualif. Test for WLD126 3/4
WQT 127-AWS Qualif. Test for WLD127 3/4
WQT 128-AWS Qualif. Test for WLD128 3/4
WQT 129-AWS Qualif. Test for WLD129 3/4
WQT 220-AWS Qualif. Test for WLD220 3/4
WQT 221-AWS Qualif. Test for WLD221 3/4
WQT 222-AWS Qualif. Test for WLD222 3/4
WQT 223-AWS Qualif. Test for WLD223 3/4
WQT 224-AWS Qualif. Test for WLD224 3/4
WQT 225-AWS Qualif. Test for WLD225 3/4
WQT 226-AWS Qualif. Test for WLD226 3/4
WQT 227-AWS Qualif. Test for WLD227 3/4

Students will pass the AWS standard tests (WQT) in each position and rod before they are allowed to proceed. Students with previous welding experience, will be asked to pass the test at their current level of proficiency and they may go on from there.

Student Interest Code
R-I-S

WORD PROCESSING

(Certificate)

Nature of the Work

A rapid flow of written communication is essential to the modern office. To facilitate the communication process, business has developed word processing centers. Trained operators of Video Display Terminals handle transcription and typing for several departments. These operators produce letters and reports on high-speed typing machines from material stored on magnetic medium. They eliminate a great deal of retyping because they make corrections before producing a final copy.

Training, Other Qualifications

Word processors need good spelling, punctuation and grammar skills. They also need to be excellent typists before training on either microcomputers with word processing software or dedicated word processors. They should have at least a high school diploma and advanced training in the word processing area.

Employment Outlook

Employment of trained word processors is expected to increase faster than the average for all occupations through the 1990's.

PROGRAM DESIGN–WORD PROCESSING CERTIFICATE

This curriculum, leading to a word processing certificate, is designed to provide personnel with a general understanding of the word processing concept as it applies to modern business as well as providing entry-level skills on VDT equipment and machine transcription. The program also includes a review of grammar, punctuation, and spelling.

COURSE REQUIREMENTS

ENG 125	- Communications II . . .	3
ENG 120	- Grammar for Transcription	2
WPR 120	- Fundamentals of Office Systems	2
WPR 121	- Word Processing I . . .	2
WPR 122	- Word Processing Applications	2
WPR 123	- Advanced Text Editing .	2
PC 129	- Programming in BASIC .	3
		16

G.P.A. requirement of 2.0 for graduation.

Marjorie Hunt, Secretarial and Word Processing Instructor.

WORD PROCESSING SYSTEMS MANAGEMENT

(Certificate)

Program Design

The word processing systems management certificate incorporates all of the concepts an entry-level operator will need as well as advanced concepts of systems management on shared-logic equipment and records processing. It places increased emphasis on the communications skills and the math skills needed in higher-level word processing positions available in the business community.

Summer Session

Course No.		Hrs. Cr.
WPR 121	Word Processing I	2
WPR 122	Word Processing Applications	2
ENG 120	Grammar for Transcription	2
		6

Fall Semester

WPR 123	Advanced Text Editing	2
WPR 120	Fundamentals of Office Systems	2
ENG 101	Composition I	3
BUE 103	Business Math	3
ACT 121	Fundamentals of Accounting	3
PSY 220	Human Relations	3
		16

Spring Semester

*WPR 124	Records Processing & File Design	2
**WPR 125	Information Processing & Systems Administration	2
BUE 222	Business Communications	3
PC 129	Programming in BASIC	3
SPH 101	Speech	3
		13
	Total Credit Hours	35

*Prerequisite WPR 123

G.P.A. requirement of 2.0 for graduation.

COOPERATIVE AGREEMENTS WITH OTHER COMMUNITY COLLEGE DISTRICTS

There are a number of one and two-year and certificate educational programs that IVCC does not offer to students within its district. Cooperative agreements with other community college districts now allow students from Community College District 513 to select one of the following programs and to attend the program at the in-district tuition rate in effect the college selected.

In some programs, part of the course work is taken at IVCC and some at the other college involved. Other programs must be taken in total at the community college offering the program.

The cooperating college will issue the degree or certificate for successful completion of the program of study.

KANKAKEE COMMUNITY COLLEGE (Write: Admissions Office, Kankakee, Illinois)
- Air Conditioning & Refrigeration (Certificate and Degree)
- Medical Laboratory Technician (Degree)
- Radiologic Technology (Degree)
- Respiratory Care Technology (Certificate)

KISHWAUKEE COLLEGE (Write: Admissions Office, Malta, Illinois)
- Aboriculture/Tree Surgery (Certificate)
- Auto Body (Degree)
- Floral Design and Merchandising (Certificate and Degree)
- Floral Horticulture (Certificate)
- Garden Center Operations (Certificate)
- Golf Course and Turf Management (Certificate and Degree)
- Greenhouse Management (Degree)
- Nursery Management and Landscape Design (Certificate and Degree)
- Ornamental Horticulture (Degree)
- Park and Grounds Maintenance (Certificate)
- Radiologic Technology (Degree)
- Truck and Construction Equipment (Certificate and Degree)
- Water Quality Control (Degree)

SAUK VALLEY COLLEGE (Write: Admissions Office, Dixon, Illinois)
- Auto Body (Certificate)
- Construction Technology (Certificate and Degree)
- Heating, Refrigeration, Air Conditioning and Solar Energy (Certificate and Degree)
- Medical Laboratory Technology (Degree)
- Medical Radiography (Degree)
- Ornamental Horticulture (Certificate)

WAUBONSEE COMMUNITY COLLEGE (Write: Director of Admissions, Sugar Grove, Illinois)
- Auto Body (Certificate)
- Environmental Control Technology (Certificate and Degree)
- Interpreter Training (All Certificates and Degrees)
- Legal Transcription (Certificate)
- T.V. Specialist (Certificate)

ELGIN COMMUNITY COLLEGE (Write: Admissions, Elgin, Illinois)
- Graphic Design (Degree)
- Hospitality Management-Restaurant Management (Degree)
- Hospitality Management-Culinary Arts) (Degree)

JOLIET JUNIOR COLLEGE (Write: Admissions Office, Joliet, Illinois)
- Construction Technology (Certificate and Degree)
- Horticulture (Certificate and Degree)
- Interior Design (Degree)
- Library and Media Aide (Certificate and Degree)
- Occupational Safety (Certificate and Degree)
- Special Education Aide (Certificate and Degree)
- Teacher Aide (Certificate and Degree)

ROCK VALLEY COLLEGE (Write: Admissions Office, Rockford, Illinois)
- Aviation Maintenance Technology (Certificate and Degree)
- Banking and Finance-Banking Option (All Certificates and Degrees)
- Banking and Finance-Savings & Loan Option (All Certificates and Degrees)
- Building Construction Technology (All Certificates and Degrees)
- Commercial Aviation (All Certificates and Degrees)
- Human Services (Certificate and Degree)
- Instrument Pilot (Certificate)
- Library/Media Technical Assistant (All Certificates and Degrees)
- Occupational Safety & Health Technology (All Certificates and Degrees)
- Pilot Maintenance (Certificate)
- Purchasing (All Certificates and Degrees)
- Quality Assurance (All Certificates and Degrees)
- Recreational Leadership (All Certificates and Degrees)
- Respiratory Therapist (Certificate and Degree)

FOR MORE INFORMATION CONTACT THE ADMISSIONS OFFICE AT IVCC OR ANY OF THE ABOVE COMMUNITY COLLEGES.

MEDICAL RADIOGRAPHY[1]

COOPERATIVE AGREEMENT PROGRAM

[1]This is a Cooperative Program with Sauk Valley College of Dixon, Illinois.

This program is conducted under a joint educational agreement between Illinois Valley Community College and Sauk Valley College. The student needs to make application to both Illinois Valley Community College and Sauk Valley College for admission to the Medical Radiography program.

Program Design

This program has been designed to prepare men and women for careers in Medical Radiography. Although technological advancements in the radiographic sciences have created a demand for more technically proficient personnel, patient service remains the primary objective of the Medical Radiographer. The program meets the challenges of the technology with a curriculum that exceeds the guidelines established by the American Medical Association's Council on Medical Education. The graduates from this program are eligible to write the §national Certification examination administered by the American Registry of Radiologic Technologists.

FIRST YEAR

First Semester

Course No.	Hrs. Cr.
*ZOO 107 - Anatomy and Physiology I	4
+Health 194 - Introduction to Radiologic Technology	5
+Psychology 100 - Orientation	1
+Health 184 - Radiologic Technology Clinical Experience I	3
+Health 193 - Technical Nursing	2
	15

Second Semester

*ENG 101 - English Composition I or ENG 124 - Communications I	3
+Health 185 - Radiologic Technology Clinical Experience II	3
*MTH 100, 101, 102, 103, 104, or 200 or 201	3-5
Health 195 - Intermediate Radiologic Technology	5
	14-16

Summer Session

Course No.	Hrs. Cr.
+Health 186 - Radiologic Technology Clinical Experience III	2
+Health 196 - Electricity for Radiologic Technologists	2
*Social Science Elective	3
	7

SECOND YEAR

First Semester

+Health 197 - Ionizing Radiation in Medicine	4
+Health 294 - Quality Control in Radiography	3
+Health 284 - Radiologic Technology Clinical Experience IV	4
*Humanities Elective	3
	14

Second Semester

*ENG 102 - English Composition II or ENG 124 - Communications II or SPH 101 - Fundamentals of Speech	3
+Health 285 - Radiologic Technology Clinical Experience V	4
+Health 295 - The Radiology Department	3
+Health 296 - Survey of Disciplines Allied to Radiology	4
	14

Summer Session

Health 286 - Radiologic Technology Clinical Experience VI	3
+Health 297 - Advanced Radiologic Technology Seminar	2
	5

*Indicates course taught at Illinois Valley Community College.
+Indicates courses taught at Sauk Valley College.

Student Interest Code
I-R-S

COOPERATIVE AGREEMENT PROGRAM

MEDICAL LABORATORY TECHNICIAN[1]

[1]This is a Cooperative Program with Sauk Valley College of Dixon, Illinois.

This program is conducted under a joint educational agreement between Illinois Valley Community College and Sauk Valley College. The student needs to make application to both Illinois Valley Community College and Sauk Valley College for admission to the Medical Laboratory Technician program.

Nature of the Work

The increased work load imposed on clinical laboratories has caused a burden on the Registered Medical Technologist. In order to free the Medical Technologist of routine duties, the Medical Laboratory Technician is becoming the production worker in the laboratory. Freedom from routine will release the Medical Technologist to function in an administrative, educational or supervisory capacity. A person with minimum skills obtained through a structured course of study for laboratory technicians is necessary for good patient care.

Upon successful completion of the five semester program, the student is awarded an Associate in Applied Science degree. This qualifies the graduate to take the National Certifying examination required by the American Society of Clinical Pathologists. The graduate may then use the title MLT(ASCP).

Program Design

This program is designed to give a student a choice of two plans, outlined on the following pages.

Student Interest Code
I-S-A

PLAN I

FIRST YEAR

Summer Session

Course No.	Hrs. Cr.
*English 124 - Communications I or English 101 - Composition I	3
*ZOO 107 - Anatomy & Physiology	4
	7

First Semester

*Chemistry 104 - Chemistry or *Chemistry 106 - General Chemistry	4-5
*Humanities Elective	3
*ENG 125 - Communications II or *ENG 102 - English Composition II	3
**HEA 150 - Orientation to the Medical Laboratory	2
*BOT 109 - Microbiology	4
	16-17

Second Semester

*Chemistry 106 or 107 - General Chemistry	5
+Health 151 - Medical Laboratory Science I	3
+Chemistry 104 - Introduction to Science Instrumentation	3
*Zoology 108 - Anatomy & Physiology II	4
+Health 193 - Technical Nursing	2
	17

SECOND YEAR

Summer Session

+Health 155 - Medical Laboratory Science II	8

Third Semester

+Health 160 - Medical Laboratory Science III	4
+Health 167 - Microbiology for Medical Laboratory Students	5
+Health 168 - Medical Laboratory Science IV	5
*Math Elective	3
	17

Fourth Semester

++Health 170 - Medical Laboratory Practicum	8
+Social Science Elective	3
	11

(SEE PLAN II NEXT PAGE)

CHECK IVCC COLLEGE CATALOG FOR COURSE PREREQUISITES

PLAN II

Summer Session

Course No.	Hrs. Cr.
*Zoology 107 - Anatomy & Physiology	4

FIRST YEAR

First Semester

*Chemistry 104 or 106 - General Chemistry	4-5
*English 124 - Communications I or English 101 - Composition I	3
*Botany 109 - Microbiology	4
**HEA 150 - Orientation to the Medical Laboratory	2
Social Science Elective	3
	16-17

Second Semester

*Chemistry 106 or 107 - General Chemistry	5
*Humanities Elective	3
*Zoology 108 - Anatomy & Physiology II	4
*English 102 - Composition II or *English 125 - Communications II	3
	15

Summer Session

+Chemistry 104 - Introduction to Scientific Instrumentation	3
+Health 151 - Medical Laboratory Science I	3
	6

SECOND YEAR

Third Semester

+Health 155 - Medical Laboratory Science II	8
*MTH Elective	3
	11

Fourth Semester

+Health 160 - Medical Laboratory Science III	4
+Health 167 - Microbiology for Medical Laboratory Students	5
+Health 168 - Medical Laboratory Science IV	5
+Health 193 - Technical Nursing	2
	16

Summer Session

++Health 170 - Medical Laboratory Practicum	8

* Indicates courses taught at IVCC.

+ This course will be taken at Sauk Valley College

++ This course will be taken through Sauk Valley College but the students will be attending classes at a hospital within the Illinois Valley Community College district 8 hours per day Monday thru Friday.

** Will be taught at a hospital in IVCC district.

COURSE DESCRIPTIONS

THE FOLLOWING PAGES OUTLINE THE COURSE DESCRIPTION OF EACH OF THE CREDIT COURSES OFFERED BY IVCC. THEY ARE PRESENTED IN AN ALPHABETICAL ORDER BEGINNING WITH:

ACCOUNTING . . . . . .
AGRICULTURE. . . . . .
ALLIED HEALTH. . . . . .

AND ENDING WITH

WELDING. . . . . .
WORD PROCESSING. . . . .
ZOOLOGY. . . . . .

COURSE NUMBERING SYSTEM

ALL COURSES CARRY A THREE DIGIT NUMBER.

(1) THE FIRST DIGIT INDICATES FRESHMAN OR SOPHOMORE LEVEL: 1 OR 2. A FIRST DIGIT OF 0 SIGNIFIES A REMEDIAL-DEVELOPMENTAL REVIEW OF BASIC SKILLS COURSES.

(2) THE MIDDLE DIGIT SIGNIFIES THE CURRICULUM AREA THE COURSE IS ASSIGNED TO:

0 = BACCALAUREATE (TRANSFER)
1 = CONTINUING EDUCATION
2 = OCCUPATIONALLY ORIENTED
3 OR 9 = GENERAL STUDIES

FOLLOWING EACH COURSE DESCRIPTION IS AN INDICATED OF THE SEMESTER OR TERM IN WHICH THE COURSE IS NORMALLY OFFERED, SUBJECT TO MINIMUM CLASS SIZE REQUIREMENTS. THERE IS NO COMMITMENT TO OFFER ANY COURSE UNLESS STUDENT ENROLLMENTS IN THAT COURSE OR SECTION MEET ESTABLISHED MINIMUM STANDARDS.

F = FALL
SP = SPRING
SU = SUMMER
V = VARIABLE ENTRY/EXIT, INDIVIDUALIZED INSTRUCTION: CONTACT THE STUDENT RECORDS OFFICE FOR REGISTRATION INFORMATION.

ACCOUNTING

ACT 101. Financial Accounting

Course deals with basic financial accounting concepts, the accounting cycle, financial statements, accounting for merchandising firms, accounting systems, business organizations including special emphasis on corporate equity accounting, cash and marketable securities, receivables, payables, inventories, plant and equipment, long term liabilities, statement of changes in financial position, and financial statement analysis. Recommended for students who intend to major in business and transfer to a four year university.

PREREQUISITE: Sophomore standing with a 2.0 g.p.a., or completion of one year of high school accounting, or completion of ACT 121 with a grade of B or better.
CREDIT: Three semester hours.
OFFERED: F, S, SU

ACT 102. Managerial Accounting

Course deals with basic managerial accounting concepts and practice including classification of costs, cost-volume-profit relationships, manufacturing costs, job order and process cost systems, budgeting, standard costs and variance analysis, direct and absorption costing, cost allocation, decentralized operations and transfer pricing, relevant costs, pricing decisions and make or buy decision, and capital budgeting.

PREREQUISITE: ACT 101.
CREDIT: Three semester hours.
OFFERED: F, S, SU

Ronald Picker, C.P.A., Accounting and Marketing Instructor.

ACT 120. Tax Accounting

The course is intended for students that seek to file business and personal tax returns. Such topics as methods of payment of tax liability, recognition of gains and losses, capital gains and losses, dividends, inventories, depreciation, and income averaging will be covered.

PREREQUISITE: ACT 101.
CREDIT: Three semester hours.
OFFERED: F, SP

ACT 121. Fundamentals of Accounting

Emphasis is placed on the procedural aspects of financial accounting for a sole proprietorship. The accrual basis is used, debit and credit is studied as it relates to the accounting equation. The entire accounting cycle is covered for both service and merchandising businesses, including adjustments, preparation of financial reports, and closing procedures. Also, included are bank statements reconciliation, petty cash, special journals, and payroll accounting. A practice set is included at the end of the course to review entire semester. Intended for students who plan to take only one semester of accounting or for those who need preparation before enrolling in ACT 101 or ACT 122.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ACT 123. Accounting Procedures on a Microcomputer

Course deals with the implementation of a realistic computerized accounting system on a microcomputer. The accounting system will include a general ledger, an integrated accounts receivable and payable system, a payroll system and a fixed asset depreciation system. Lecture, one-half hour per week; lab, one hour per week.

PREREQUISITE: One semester of college accounting.
CREDIT: One semester hour.
OFFERED: F. SP

ACT 124. Tax Preparation Practicum

This course provides an opportunity for practical application of Tax Accounting 120. After completing 18 hours of classroom work, the students spend 40 hours (4 hours per week) as tax preparers in the Volunteer Income Tax Assistance (VITA) program conducted under the auspices of the federal government. This program provides free tax preparation assistance to low income, elderly, non-English speaking and handicapped taxpayers.

PREREQUISITE: Concurrent enrollment in ACT 120.
CREDIT: One semester hour.
OFFERED: SP

ACT 201. Intermediate Accounting

This is a course dealing with accounting theory and concepts, comprehensive treatment of assets, liabilities, capital stocks, and retained earnings.

PREREQUISITE: ACT 102.
CREDIT: Three semester hours.
OFFERED: F

ACT 202. Cost Accounting

A study of the process of generating accounting data which will be useful to management in performing the functions of planning and control, and decision making. Topics emphasized include product costing: cost, volume, profit relationships, budgeting and standard costs.

PREREQUISITE: ACT 102.
CREDIT: Three semester hours.
OFFERED: F

ACT 220. Taxes II

This course is an extension of the study of taxes begun in ACT 120. It covers taxation of corporations; tax-free reorganizations; corporate distributions; sub-chapter S; partnerships, including transfer of partnership interests; and taxation of trusts and estates.

PREREQUISITE: ACT 120
CREDIT: Three semester hours.
OFFERED: On demand.

ACT 221. Accounting for Non-Business Organizations

This course covers the basic accounting concepts and methods related to non-profit and governmental agencies such as municipal governments, hospitals, and schools. Topics covered include accounting and reporting capabilities, fund accounting systems, governmental funds, proprietary funds, fiduciary funds, accounting for fixed assets and long-term liabilities, valuation and depreciation of assets, accrual basis, budgets, interfund transfers, and financial reports. This course is recommended for students who plan to work with governmental agencies, hospitals, or schools - either directly or indirectly. It is also recommended for anyone serving in an elected capacity on a local board or as a treasurer.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: On demand.

ACT 222. Intermediate Accounting II

Continuation of Intermediate Accounting I dealing with theory and concepts. Comprehensive treatment of assets, liabilities, capital stock, retained earnings, error correction, pension, costs, leases,

analysis of financial statements, and price adjustments

PREREQUISITE: ACT 201.
CREDIT: Three semester hours.
OFFERED: SP

ACT 223. Principles of Auditing

Theory, design, and application of auditing. Deals with internal control, financial reporting standards, and audit objectives. Also covered will be accountant's legal responsibility, preliminary arrangement for an audit, general procedure for an audit, and the audit report.

PREREQUISITE: Twelve hours of accounting.
CREDIT: Three semester hours.
OFFERED: SP

ACT 227. Accounting Internship

A practicum where students will be employed by business in an accounting related position. In addition to strengthening the student's understanding of accounting principles and procedures, the internship will enable the student to gain an insight into the total operation of a business. After having completed the internship, the student should be able to enter the job market at the assistant accountant or accountant level. Fifteen hours work per week required by the intern.

PREREQUISITE: Twenty-eight hours in accounting program to include ACT 101, ACT 102, and ACT 120.
CREDIT: Three semester hours.
OFFERED: F

ACT 228. Accounting Internship

A continuation of the practicum begun in accounting internship 227. Fifteen hours work per week required by the intern.

PREREQUISITE: ACT 227 (consent of instructor).
CREDIT: Three semester hours.
OFFERED: SP

AGRICULTURE (AGRI–BUSINESS)

AGR 100. Introduction to Field Crop Science

An introductory course in field crop production dealing with origin, taxonomy, classification, morphology, physiology and ecological basis of growth, reproduction improvement and utilization of corn, soybean, small grain, storage principles, field crop production hazards. Lecture, two hours per week; seminar, one hour per week; lab, two hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

AGR 101. Introductory Agricultural Economics

This course is to develop an understanding of the role of agriculture in the U.S. and world economics. Also to develop a basic understanding of principles of economics and their application to agriculture problems.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

AGR 102. Introduction to Agriculture Mechanics

This course is designed to introduce students to the various aspects of agricultural mechanics. Special emphasis will be placed upon farm surveying, agriculture structures, rural electrification, and farm power and machinery. The content of this course is chosen to given an overview of several technical areas that comprise agricultural mechanization. Lecture, one hour per week; seminar, one hour per week; lab, four hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

AGR 103. Animal Science

This is a one semester course that will cover areas of skills and management practice needed to raise and handle livestock. Careers, selection, physiology, anatomy, nutrition and health practices are a few of the areas to be covered. Lecture, one hour per week; seminar, one hour per week; lab, two hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

AGR 111. Corn and Soybean Production

This course will encompass the area of chemical and biological weed and insect control, crop breeding, during and storage of corn and soybeans, other good management practices where needed on three crops. Simulated field experiments will be conducted and discussed to demonstrate some of the principles taught in the classroom.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: V

AGR 120. Introduction to Agriculture Business

A course designed to acquaint the student with the agricultural business structure, types of jobs available, and the knowledge and skills needed in the various agricultural occupations. Lecture, three hours a week, and field trips.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

AGR 121. Feeds and Feeding

A course offering designed to show the composition of feeds and animal products. Also the course content will contain information about how animals utilize their food to meet the demands of production and maintenance. Lecture, one hour per week; seminar, one hour per week; lab, two hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

AGR 123. Agriculture Production Techniques

This course is designed to meet the needs of the Agriculture Community for specialized educational experiences. Each class will be individualized to a particular set of needs and a credit value assigned for each section offered. Typical examples include uses of herbicides and insecticides, machine operation techniques, farm problems, and proper land usage. This course may be repeated for a maximum of six semester hours.

PREREQUISITE: None.
CREDIT: Variable, ½ to 3 semester hours.
OFFERED: V

AGR 201. Introductory Soil Science

This course will cover such areas as soil formation, color, structure, texture, classes and types. The classes will also include the use of fertilizers and the interpretation of soil tests. Laboratory experiments will be provided to enhance the work with soils and to provide the student with ample opportunities to do class and individual experiments, and to ask questions. Lecture, two hours per week; seminar, one hour per week; lab two hours per week.

PREREQUISITE: Course in Chemistry.
CREDIT: Four semester hours.
OFFERED: F

AGR 220. Crop Production

The course will encompass the area of chemical and biological weed control, crop breeding, drying and storage of crops, seed certification and other good management practices where needed on major crops. Simulated field experiments will be conducted to demonstrate some of the principles taught in the classroom. Lecture,

two hours per week; seminar, one hour per week; lab, two hours per week.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

AGR 221. Farm Management Problems

This course will acquaint the student with the problems of managing an operating farming business including enterprise selection, microcomputer applications, acquiring the farming unit, leasing arrangements, resource allocations, labor management, decision making processes, farm records and income taxes, capital investments, and soil conservation practices. Lecture, three hours a week.

PREREQUISITE: Basic Economics Course.
CREDIT: Three semester hours.
OFFERED: F

AGR 222. Agriculture Chemicals

This course includes a comprehensive study of common farm practices used in the chemical control of crop and livestock pests. Subjects include understanding pesticides, rates and application, growth regulators, insects, fertilizers, and pesticide laws and regulations. Lecture, one hour per week; seminar, one hour per week; lab, two hours per week.

PREREQUISITE: CHM 121 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: F

AGR 223. Agricultural Sales

This course will consist of lecture-lab sessions dealing with aspects of agricultural sales. The ability to satisfy the customer's needs will be used as the basis for study. This offering will cover such areas as: determining customer needs, analyzing the product, resolving objections, and closing the sale. Emphasis will be placed on student participation in the classroom and the laboratory. Lecture, one hour a week; laboratory, two hours a week.

PREREQUISITE: None
CREDIT: Two semester hours
OFFERED: F

AGR 224. Internship

This is an on the job learning situation in which the student, the employer, and the supervising instructor keep in close contact to help the student implement learning technical information. This course joins together the technical information taught in the classroom and laboratory with the in-field experiences. A 1/2 semester hour seminar will meet concurrently with each internship period.

PREREQUISITE: Second year standing in Agribusiness or Agrimechanics, completion of AGR 225 for Agribusiness students only, or consent of instructor.
CREDIT: Four and one-half semester hours. Can be repeated once.
OFFERED: F, SP, SU

AGR 225. Agriculture Internship Seminar

This course is designed to prepare the student for enrollment in Agriculture Internship, AGR 224. Instruction on obtaining and holding a job will be provided. Also, the student will become familiar with the forms, objectives, and requirements involved with participating in the agriculture internship program.

PREREQUISITE: Enrolled in an Agribusiness program.
CREDIT: One semester hour.
OFFERED: SP

AGR 226. Agriculture Marketing and Finance

An analysis of agricultural markets and the market place. Finance includes a study of financial management techniques, the uses of credit, and the sources of credit.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: SP

AGR 227. Livestock Selection

This course will provide students an opportunity to gain experience in evaluating livestock. Selection will be based on marketing and/or production standards. Emphasis will be given to the development and presentation of oral reasons. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: Sophomore standing or instructor's consent.
CREDIT: Three semester hours.
OFFERED: SP

AGRICULTURE (MECHANICS)

AGM 120. Basic Gas Engines

This course provides a working knowledge in the repair, preventative maintenance, and adjustment of single and multi-cylinder engines. It will also cover principles of operation, related engine systems, and examination and measurement of engine components. Lecture, two hours per week; lab, four hours per week.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

AGM 121. Hydraulics

This course will provide the student with a basic working knowledge of modern hydraulic systems. Emphasis will be on system components function, physical construction, and operation. Preventive maintenance and trouble shooting of systems will be stressed. Lecture, two hours per week, lab, two hours per week.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: F

AGM 125. Transmissions and Final Drives

This course provides the theory and basic skills for the disassembly, inspection, repair, reassembly, adjustment, and maintenance of transmissions and final drives for agricultural equipment. Course will also include clutch and brake theory, servicing and adjustments. Lectures, one and one-half hours per week; lab, three hours per week.

PREREQUISITE: AGM 121
CREDIT: Three semester hours.
OFFERED: SP

AGM 126. Air Conditioning

This course will provide the student with an understanding of the fundamentals of air conditioning systems used in agricultural equipment. Development of skills necessary to service and perform preventative maintenance on air conditioning systems will be emphasized. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: SP

AGM 127. Agricultural Electrical Systems

This course will provide the student with the basic understanding and the principles of electricity. Correlation of these principles with electrical systems and circuits found in agricultural equipment will be studied. Emphasis will be placed

on repair, service, and preventative maintenance of the component parts of an electrical system. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: MTH 123
CREDIT: Two semester hours.
OFFERED: SP

AGM 129. Introduction to Diesel Injection Systems

This course provides the student with both theory and practical study of various diesel fuel systems found in agricultural equipment. This course will deal specifically with nozzle removal, testing, disassembly, repair, and reassembly. Emphasis will be on total system preventative maintenance. Lecture, one and one-half hours per week; lab, three hours per week.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: SP

AGM 220. Advanced Engine Rebuilding

This course is a continuation of AGM 120. Course content will include such areas of study as piston and cylinder reconditioning, engine bearing and seal installation, as well as engine cylinderhead servicing. Its purpose is to develop skills by incorporating more hands-on experience in engine rebuilding. Lecture, one hour per week; lab, four hours per week.

PREREQUISITE: AGM 120 or Divisional Approval.
CREDIT: Three semester hours.
OFFERED: SP

AGM 221. Advanced Hydraulic Analysis and Repair

This course will provide the student with a practical approach to hydraulic systems found in agricultural equipment. Emphasis will be placed on analysis, servicing, and repair of hydraulic system components. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: AGM 121.
CREDIT: Two semester hours.
OFFERED: F

AGM 222. Advanced Tractor Tune-up and Analysis

This course deals with the practical use of testing, servicing, and repair equipment needed for complete engine tune-up. Total engine condition analysis will also be emphasized. Lecture, one hour per week; lab, six hours per week.

PREREQUISITE: AGM 220, AGM 228 and AGM 229.
CREDIT: Four semester hours.
OFFERED: SP

AGM 223. Equipment, Parts, and Sales Management

This course will deal specifically with the business practices associated with the service shop, parts department, and sales department. Areas of study will include shop labor costs, time sheets, warranty forms, and shop tickets. Parts department will include parts pricing, storage, merchandising, and inventory controls. Sales department will include product knowledge, selling new and used equipment, and sales forms.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F

AGM 225. Set Up and Delivery of Agri-Machines

This course will provide the student with instruction for set-up, pre-delivery, and delivery service of tillage, planting, and harvesting machines with emphasis on field adjustments and preventive maintenance. Lecture, one hour a week; lab, four hours a week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: SP

AGM 227. Electrical Systems Analysis and Repair

This is an advanced course dealing with electrical systems analysis and repair. The development of skills necessary for operation of testing equipment on electrical systems and electrical component reconditioning will be emphasized. Lecture, one hour per week; lab, four hours per week.

PREREQUISITE: AGM 127.
CREDIT: Three semester hours.
OFFERED: F

AGM 228. Diesel Injection Systems I

This course provides the student with an understanding and basic skills necessary for servicing Roosa-Master and CAV injection pumps. Diagnosis and correction of pump malfunction will be emphasized. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: AGM 129 or Divisional approval.
CREDIT: Two semester hours.
OFFERED: F

AGM 229. Diesel Injection Systems II

This course provides the student with an understanding and basic skills for servicing American Bosch and Robert Bosch injection pumps. Diagnosis and correction of pump malfunction will be emphasized. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: AGM 129 or Divisional approval.
CREDIT: Two semester hours.
OFFERED: SP

ALLIED HEALTH

A-H 120. Introduction to Health Science

This is an introductory study of health concepts basic to health occupations or for anyone interested in health. Theories of health-illness continuum are examined and compared. Methods to achieve and maintain a maximum health status are discussed stressing nutrition. Stress factors and coping methods which are related to common health problems are discussed including common pathogenic organisms. Modern methods of prevention and treatment are explored in relation to specific problems.

PREREQUISITE: High school or college basic biology.
CREDIT: Three semester hours.
OFFERED: F, SP

A-H 122. Human Growth and Development for Health Workers

A study of human growth and developmental process as it relates to the mental, physical, and social characteristics through the life span. Health promotion and maintenance measures for each stage are introduced.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

A-H 124. Basic Nursing Concepts and Skills.

This course is designed to enable an individual to perform those services commonly performed by the Health Care Assistant. Health Care Assistant functions and techniques useful in carrying them out are presented. Emphasis is placed on procedure performance and on the basic understanding and application of concepts and principles which apply. Lecture, three hours per week; lab, two hours per week.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: V

A-H 125. Supervised Practice

Through supervised practice an opportunity is provided for developing proficiency and confidence in the utilization of knowledge and skills previously acquired. This practice will provide clinical experience in the hospital and the nursing home for students enrolled in the Nursing Assistant Program. Three hours lab per week.

PREREQUISITE: Concurrent enrollment or previous successful completion of the Nurse Assistant Program or consent of the instructor.
CREDIT: One semester hour.
OFFERED: V

A-H 126. Cardio-Pulmonary Resuscitation

A course designed to teach the principles and techniques of administering cardio-pulmonary resuscitation. Students will be prepared to meet the needs of most situations in which emergency first aid care for CRR is needed and medical assistance is not excessively delayed. Upon satisfactory completion of the course, students will receive certification from the American Red Cross.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: V

A-H 127. Therapeutic Uses and Effects of Drugs

The content is intended to be utilized by the nurse practioner, giving her greater competence working with drugs in the clinical area. The course is designed to give individual knowledge of drug classification, actions, methods of administration, safety precautions, and nursing implications and/or adverse response.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F, SP

A-H 128. Cardio-Pulmonary Resuscitation Review

A course designed to review and update the principles and techniques of administering cardio-pulmonary resuscitation. Upon satisfactory completion of the course, students will receive certification from the American Red Cross. Can be repeated four times.

Prerequisite: Students must show evidence of prior CPR certification.

Credit: One-half semester hour.
Offered: F, SP

A-H 220. Emergency Medical Procedures

The course is a study of emergency measures and skills used to save life and prevent further injury. It is designed for police, firemen, ambulance personnel, such as drivers, and others who may be called for emergency rescue of accident victims.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

A-H 221. Emergency Medical Technician-Ambulance

This course is designed to prepare ambulance personnel for the overall role and responsibilities of the Emergency Medical Technician in performing both emergency care and operational aspects of his job by developing skill in short of those rendered by physicians, or by paramedical personnel under the direct supervision of a physician, and skill in the use of care for all equipment required to accomplish his job. Enrollment priority given to people working for an ambulance service or those who will work for an ambulance service upon course completion. A final grade of "C" or above must be attained before the student will be permitted to take the EMT certification exam.

PREREQUISITE: None
CREDIT: Five semester hours.
OFFERED: V

A-H 222. Emergency Medical Technician-Refresher

This course is designed to provide the Emergency Medical Technician with a review of material and techniques used in rendering emergency care to the sick and injured. The course also teaches the EMT personnel new methods and procedures in providing emergency medical care. Completion of this course will fulfill one requirement toward EMT re-certification. This course can be repeated four times for credit.

PREREQUISITE: None
CREDIT: One and one-half semester hours.
OFFERED: V

A-H 223. Emergency Medical Technician Refresher-Update I

This course is designed to provide in-service training to practicing Emergency Medical Technicians. The course will be organized to cover the material and techniques used by EMT personnel in the treatment of emergency conditions. The people taking this course will be able to obtain points to help in the retention of their EMT Certification.

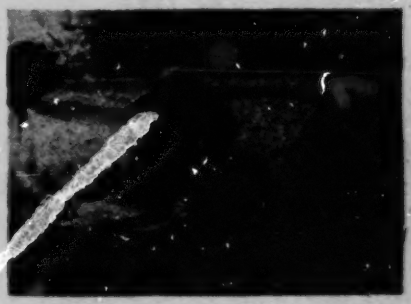
PREREQUISITE: A-H 222.
CREDIT: 1.5 semester hours.
OFFERED: V

ANTHROPOLOGY

ANT 100. Introduction to Anthropology

This course is designed as a general anthropology course. The intent is to provide the student with a systematic and comprehensive coverage of basic concepts, principles, and terminology; in both physical and cultural anthropology.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP



ART

ART 100. Art Survey

The study of paintings, sculpture, architecture and minor arts as they developed from prehistoric times to the Renaissance period, including early art of Africa and Americas. Lecture, three hours per week.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: F, SP, SU

ART 101. Art Survey II 1400-1800

Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the 18th century.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: SP, SU

ART 103. Design I

A basic studio course for those interested in fine arts, commercial art or art education. The student carries out a series of problems relating to the elements and principles of design. The course develops the student's organizational abilities and technical skill. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

ART 104. Design II

A studio course; continuation of ART 103 using a variety of media. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: ART 103 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

ART 105. Drawing I

Basic studio course for those interested in fine arts, commercial art, or art education. Using a variety of media and approaches, student develops ability in descriptive and interpretive drawing, including perspective and outdoor sketching. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: F, SP, SU

ART 106. Drawing II

Charcoal, pencil, and ink are basic materials. Exploring mixed media and ink wash on different papers. Emphasis on expressive interpretation. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: ART 105 or equivalent.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 107. Painting I

Oil (or acrylic) painting is explored through instruction in materials and techniques, composition and color and the development of individual expression. A series of original paintings are executed by each student. An examination of important trends in painting.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 108. Introduction to Watercolor Painting

Introductory watercolor deals with pigments, equipment, materials, color theory and practice, and watercolor methods. The study of transparent watercolor techniques includes wash, dry brush and wet-in-wet.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: F, SP, SU

ART 109. Pottery I

Introduction to the terminology and technical aspects of ceramics. Basic techniques for clay preparation, hand forming, wheel throwing, and the operation of the kiln kick wheels and power operated potter's wheels. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 200. Sculpture I

A study of several media and techniques involving clay modeling, casting, carving and direct plaster. Construction of armature and use of the basic tools of the sculpture. Modeling from life is a part of this course. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 201. Weaving I

Introductory course in the fundamentals and techniques of weaving. Included will be yarn calculations, pattern reading, design experimentation, and simple spinning. A variety of looms, simple to complex, will be used. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F

ART 202. Weaving II

This course is designed to be a continuation of Weaving I, involving a further exploration of fiber techniques. Greater emphasis will be placed on design, understanding pattern drafting, spinning on a spinning wheel and natural dyes. A variety of looms, simple to complex, will be used. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: SP

ART 203. Three Dimensional Design

Study of three-dimensional design in a variety of media such as paper, clay, plaster, wood, metal and plastics. The elements of design as related to creative expression and specific materials in 3-D design. Lecture, one hour per week; studio, four hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

ART 204. Art Fundamentals

Theory and practice of the creative processes in the visual arts. Students will gain an appreciation of the various art forms and will have live studio work in drawing and design, painting, printmaking, pottery and sculpture. Lecture, one hour a week; laboratory, two hours a week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 205. Life Drawing

The study of the structure, anatomy, and expressive design of human form; drawing from the model, using a variety of drawing media. Lecture, one hour per week; studio, four hours per week.

PREREQUISITE: ART 106.
CREDIT: Three semester hours.
OFFERED: SP

ART 206. Visual Communications I

An introduction to design in advertising. A studio course in layout, lettering, mechanical skills, and studio preparation for graphic production, as well as a survey of reproduction processes.

PREREQUISITE: ART 104, ART 106.
CREDIT: Three semester hours.
OFFERED: F, SP

ART 207. Painting II

Continuation of Painting I with greater emphasis on technical improvement and pictorial expression.

PREREQUISITE: ART 107.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 208. Introduction to Photography

An introduction to the principles and practices of black and white photography, this course teaches students the use of still cameras, film, composition techniques, developing skills, and printing methods. Students will supply their own cameras (35 mm or 2¼ x 2¼ or comparable formats). Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ART 209. Pottery II

Continued application of first semester procedures of Pottery I, with emphasis on the control of design in form and techniques, including methods of glaze application and decorative techniques. Practice in the operation of clay equipment, stacking and firing kilns. Experimentation in the possibilities and limitations of the medium.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

AUTOMATIC MACHINE TOOLING COMPUTER NUMERICAL CONTROL

CNC 120. CNC Machine Operations I

The student will be able to operate CNC machines, including machinery centers, turning centers and drills. Lecture, one per week; laboratory, four hours per week.

PREREQUISITE: Must be in second year of CNC Operations Curriculum.
CREDIT: Three semester hours.
OFFERED: F

CNC 122. Manual Programming

The student will be able to manually write programs for simple parts to blueprint specifications. Successful completion of this course will enable the student to be more knowledgeable of the following course (computer aided programming) during the next quarter. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: Must be in second year of CNC Operation Curriculum.
CREDIT: Three semester hours.
OFFERED: F

CNC 124. CNC Machine Operations II

Instructions in this course will be a continuation of CNC I. The student will be taught to write operation sheets, align fixtures, and load workpieces. Proper loading of programs into the machine control, verifying accuracy and editing tapes will also be taught. The basis of feed and speed will be covered. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: Must be in second year of CNC Operations Curriculum.
CREDIT: Three semester hours.
OFFERED: F

CNC 126. CNC Operations III

This course will stress the question of the common types of turning centers. Instruction in this course will be a continuation of CNC Operations II. The student will be taught to write operation sheets, align tool head and load work pieces. Proper loading of programs into the machine control, verifying accuracy and editing tapes will also be taught. The basis of feed and speeds will be covered. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: Must be in second year of CNC Operations Curriculum.
CREDIT: Three semester hours.
OFFERED: F

CNC 220. CNC Machine Programming I

In this course, the student will learn to create programs for CNC milling and drilling operations. The student will be taught to develop a sequence of operations, understand work methods and speeds and feeds. Also covered will be point to point manual programming, computer-assisted programming, verification and tape editing, and safety.

PREREQUISITE: Must be in second year of in CNC Operations Curriculum.
CREDIT: Four semester hours.
OFFERED: F

CNC 222. CNC Machine Programming II

In this course, the student will learn to create programs for CNC turning centers. The student will be taught to develop a sequence of operations, understand work holding methods and speeds and feeds. Also covered will be point to point manual programming, computer-assisted programming, verification and tape editing, and safety. Lecture, one per week; laboratory, six hours per week.

PREREQUISITE: Must in second year of CNC Operations Curriculum.
CREDIT: Four semester hours.
OFFERED: F

CNC 224. CNC Machine Programming III

In this course, the student will learn the basics of APT (Automatic Programmed Tools) programming or Compact II Programming. This will be done with the aid of interactive graphics and CNC parts programming system. Lecture, two hours per week; laboratory, four hours per week.

PREREQUISITE: Must be in second year of CNC Operations Curriculum.
CREDIT: Four semester hours.
OFFERED: F

AUTOMOTIVE MECHANICS

ATO 120. Introduction to Automotive Mechanics

This is an introductory level course designed to familiarize students with safety, service manuals, precision measuring devices, hand tools, automotive fasteners and the oxyacetylene welder. Lecture one hour per week.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F

ATO 121. Basic Gas Engines

This is an introductory course designed to give the students a background in the theory, construction, design, operation, and service of gasoline piston engines. Laboratory work will consist of the following requirements on a given engine; (1) disassembling, cleaning, inspecting, measuring, recording, machining, and reassembling. Students are encouraged to supply their own engine for this course. Lecture two hours a week; laboratory, six hours a week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

ATO 122. Basic Automotive Electricity

Basic automotive electricity is a course dealing with the theory, construction, operation and servicing of batteries, cranking systems, charging systems and ignition systems of all makes of American automobiles. Students will perform on and off the car tests, disassemble, repair and assemble components of both conventional and transistorized electrical systems using appropriate manuals, test equipment and safety practices. Lecture, two hours a week; laboratory, two hours a week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

ATO 123. Bench Work Operations

Bench work operations is a course designed to prepare the student for engine overhaul and typical job procedures encountered when repairing vehicles.

Included in the content are basic machining operations such as grinding valves and seats, cutting brake drums, drilling and tapping holes, sharpening drill bits and more. Also included will be forming of flares on tubing, soldering electrical connections and using precision measuring instruments.

All bench work operations will be done utilizing the appropriate manuals, specifications, equipment, and safety practices. Lecture, one hour per week; laboratory, three hours per week.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F

ATO 124. Power Trains and Manual Transmissions

This course includes the information relative to clutches, transmissions and differentials on the modern day motor vehicle. A study of the operation of the constant mesh and sliding gear transmission and servicing of these systems is covered. The various differentials or rear axle assemblies are also included. Lecture, two hours a week; laboratory, three hours a week.

PREREQUISITE: ATO 120 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

ATO 125. Basic Tune-Up

This course involves the practical application of theory that is covered in Internal Combustion Engine and Basic Automotive Electricity. Included are the starting, charging, compression, fuel, and ignition systems. Laboratory experience will include operations with actual motor vehicles and modern tune-up equipment. Lecture, two hours a week; laboratory, three hours a week.

PREREQUISITE: ATO 122, or equivalent or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

ATO 126. Steering and Suspension Systems

The steering and suspension systems, its function, maintenance, diagnosis and service are covered through lecture and work on live vehicles. Included is the study of wheel bearings, tire balancing, wheel alignment and geometry, spring systems, shock absorbers, and steering linkages, gears, and pumps. Lecture, two hours a week; laboratory, six hours a week.

PREREQUISITE: ATO 120 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: SP

ATO 220: Brake Systems

Automotive braking systems are covered along with their maintenance and adjustment. Repair, servicing and rebuilding brake systems including expanded shoe and caliper type, both hydraulic and power boost are studied. Rebuilding master and wheel cylinders are important aspects of the course. Lecture, two hours a week; laboratory, six hours a week.

PREREQUISITE: ATO 120, or consent of instructor.
CREDIT: Four semester hours.
OFFERED: F

James Samolitis, (right), Automotive Instructor.

ATO 221. Advanced Tune-Up & Engine Diagnosis

This advanced tune-up course utilizes oscilloscopes and infra-red exhaust analyzers for engine diagnosis. Electronic ignition, fuel and timing systems will be the main emphasis for this course. Mechanical engine problems such as engine knocks and oil consumption are also discussed. Lecture two hours a week, lab six hours a week.

PREREQUISITE: ATO 120, 122, 125 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: SP

ATO 222. Fuel Systems and Emission Control

The theory, service, diagnosis and overhaul of carburetors will be the main emphasis of this course. Other areas studied will be electronic fuel injection, feedback carburetors, turbo-chargers, intake and exhaust systems, and emission control devices including their application and service. Lecture two hours a week, lab six hours a week.

PREREQUISITE: ATO 122, 125.
CREDIT: Four semester hours.
OFFERED: F

ATO 223. Automatic Transmissions

This course includes the information relative to auto transmissions on the modern day motor vehicle. A study of the operation of the hydraulic planetary transmission and services of these systems are covered. Lecture, two hours per week; laboratory, six hours per week.

PREREQUISITE: ATO 120 and 124 or consent of the instructor.
CREDIT: Four semester hours.
OFFERED: SP

ATO 224. Automotive Accessories

Provides a comprehensive understanding of power operated accessories such as power seats, windows, door locks, antennas, automatic light controls, speed controls, windshield washers and wiper mechanism. Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: ATO 120, 122, or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

ATO 225. Heating and Air Conditioning

This course is designed to teach students the principles of automotive heating and air conditioning with emphasis placed on the basic air conditioning cycle and servicing of these systems. Laboratory work includes the use of basic A/C units and related components. Lecture, two hours a week; laboratory, two hours a week.

PREREQUISITE: ATO 122 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

ATO 227. Automotive Diesel Systems

The purpose of this course is to provide the student with the basic skills to do repair and diagnose diesel fuel systems and their related problems. Basic theory and operation will be stressed for the understanding of fuel systems and the problems they cause. Lecture two hours a week, laboratory, two hours a week.

PREREQUISITE: ATO 121.
CREDIT: Three semester hours.
OFFERED: F

ATO 228. Computerized Engine Controls

This course is designed to teach how computers aid in controlling fuel systems, electronic ignition, spark advance management and emission control devices. Computer functions, on-board diagnostics, circuit testing, feedback carburetion, and electronic fuel injection will also be discussed. Lecture, two hours a week; laboratory, two hours a week.

PREREQUISITE: ATO 122, 125, 221, & 222 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

BANK FINANCE

BFC 120. Principles of Bank Operations

This course presents a broad overview of banking functions and operational procedure. Emphasis is on banking policy and practice. Topics covered include banks and the monetary system, negotiable instruments, the relationship of commercial banks to depositors, types of bank accounts, the deposit function, the payments function, and bank loans. Also reviewed will be bank investments, bank marketing and accounting, and public service obligation of banks.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

BFC 121. Installment Credit

This course is designed to familiarize students with commercial bank installment lending policies and procedures. Emphasis is placed on establishing the credit, on obtaining and checking information, on servicing the loan, and on collecting the amounts due. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of install-

ment lending.

PREREQUISITE: BFC 120 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

BFC 122. Introduction to Commercial Lending

Course provides an introductory overview of the commercial lending function. Introduces students to the field of commercial banking. Deals with the lending process, portfolio management, and regulation.

PREREQUISITE: BFC 120.
CREDIT: Three semester hours.
OFFERED: On Demand

BFC 123. Bank Investments

This course presents the factors that affect investment strategies and decisions, grounded in a framework of fundamental investment concepts such as risk, liquidity, and yield. The basic characteristics of the major types of bank investments are studied.

PREREQUISITE: BFC 120.
CREDIT: Three semester hours.
OFFERED: On Demand

BFC 124. Analyzing Financial Statements

Designed for the student who already has an understanding of accounting and wants to know how to apply that knowledge to the interpretation and evaluation of financial reports. The course focuses on the ways in which financial statement analysis is used in bank credit decisions.

PREREQUISITE: ACT 101 or 121
CREDIT: Three semester hours.
OFFERED: On Demand

BIOLOGY

BIO 101. General Biology I

An intergrated course covering the fundamentals of the plant and animal world. Special attention is given to the structure and function of cells, the genetic continuity of life and evolution. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F, SP, SU

BIO 102. General Biology II

A continuation of the concepts introduced in Biology 101, with emphasis on human biology, ecology, and the diversity of life. The fetal pig is given special attention in the laboratory along with exercises dealing with human biology and other selected organisms. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: BIO 101.
CREDIT: Four semester hours
OFFERED: F SP

BIO 103. Principles of Biology

The study of life processes common to plants and animals. The topics include metabolism, cellular organization, reproduction, heredity, and evolution. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week. Suggested for majors or minors.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

BIO 104. Man and His Environment

A study of the human relationships with, and responsibility for, the health and well-being of our earth. Ecology, the branch of science investigating the relationships of an organism (man) with its environment (earth) are the emphasis of this course. Major considerations are given to the use and misuse of the earth's energy and material resources, the consequences of and alternatives to human actions and the individual physical costs plus collective social costs.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

Louis Borio, Division Chairperson for Life Science.

BOTANY

BOT 105. General Botany

Botany, the study of plants, includes a phylogenetic survey of the plant kingdom from bacterial and viruses to flowering plants with special emphasis placed upon the local flora. Vascular plants are considered in detail of their morphology, physiology, ecology, genetics, evolution, and taxonomy. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: BIO 101 or BIO 103 or BOT 109 or ZOO 107.
CREDIT: Four semester hours.
OFFERED: F

BOT 109. Microbiology

An introductory study of the nature and activities of micro-organisms and their effect on human affairs. Emphasis is on the fundamental principles and their applications. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: BIO 101 or BIO 103 or ZOO 107.
CREDIT: Four semester hours
OFFERED: F, SU

BUSINESS EDUCATION

BUE 101. Introduction to Business

An introductory survey course covering such topics as management, marketing, finance, labor relations, and business government relations. The course is designed to provide students an opportunity to learn business terminology and to understand the interrelatedness of the various business functions.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

BUE 103. Business Mathematics

A review of the fundamental mathematical processes, fractions, and percentage. A study of discounts, commissions, depreciation, overhead, interest, bank discount, federal income tax, amortized mortgage loans, balance sheet ratios, simple statistical measures; financial statements, statistics, graphs, stocks, and bonds.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

BUE 107. Typing I

Emphasis is placed upon production typewriting. Practice in typing business letters, forms, tabulated material and manuscripts is provided with skill building in speed and accuracy. One lecture and two hours of laboratory per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F, SP, SU

BUE 115. Brush-Up Shorthand

A review of Gregg shorthand theory

with emphasis upon dictation and transcription skills.

PREREQUISITE: One or more semesters of shorthand.
CREDIT: One and a half semester hours.
OFFERED: On Demand.

BUE 117. Brush-Up Typing

This course is designed to review and improve current typing skills and procedures.

PREREQUISITE: At least one semester of typing.
CREDIT: One and a half semester hours.
OFFERED: On demand.

BUE 120. Stocks and Bonds

A study of stock and bond markets; fundamental principles of financial investments; determination of investment procedures, management of investment funds; a look at the commodity market; an understanding of the options market.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

BUE 123. Basic Keyboarding

Emphasis is placed on learning the touch operation of the alphabetic and numeric keyboards found on computer terminals, information processors, and other keyboards. There will be a sequence of learning materials and activities used in order to reach operational skill on these keyboards in a limited amount of time. Lecture, one-half hour per week; lab, one hour per week.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

BUE 125. Shorthand I

Principles of beginning Gregg shorthand, including a thorough study of brief forms, phrasing, vocabulary building, and dictation. Pre-transcription training involves punctuation, grammar and spelling review. Three lecture and two lab hours per week.

PREREQUISITE: At least one semester of typewriting or concurrent enrollment.
CREDIT: Four semester hours.
OFFERED: F

BUE 126. Shorthand II

A continuation of Business Education 125. A review of Gregg shorthand theory through emphasis upon dictation and transcription procedures. Three lectures and two lab hours per week.

PREREQUISITE: BUE 125 or its equivalent; BUE 107 or its equivalent.
CREDIT: Four semester hours.
OFFERED: SP

BUE 128. Typing II

Emphasis is placed upon production typewriting. Ability to produce work acceptable to business as well as the development of related learnings and decision making form an integral part of the course. On lecture and two hours of lab per week.

PREREQUISITE: BUE 107 or its equivalent.
CREDIT: Two semester hours.
OFFERED: F, SP

BUE 220. Advanced Typing

Continuation of development of speed and accuracy in typing more complex business letters, forms, and manuscripts. One lecture and two hours of laboratory per week.

PREREQUISITE: BUE 128.
CREDIT: Two semester hours.
OFFERED: F

BUE 222. Business Communications

A study of types of letters used in business. It presents an understanding of the service of written communications in business, including letters, reports, and interoffice communication. The fundamentals of good letter writing are stressed and applied to typical business situations. Practical experience is given in writing letters. This course will also include a review of basic grammar and punctuation.

PREREQUISITE: Eng 101 or 124.
CREDIT: Three semester hours.
OFFERED: F, SP

BUE 224. Office Procedures and Administration

A study of the duties and responsibilities of the secretary and office manager in business and professional offices and qualities requisite for success. A management concept is developed through knowledge and techniques involved in alphabetic, geographic, numeric, and subject filing as they relate to efficient control and management of business records as well as an overview of data processing and its applications as developed through selected projects.

PREREQUISITE: BUE 128 or concurrent enrollment.
CREDIT: Three semester hours.
OFFERED: F, SP

BUE 225. Introduction to Transcription

Further development of vocabulary skill and dictation speed. Transcription techniques are refined for occupational proficiency. One lecture and two hours of lab per week.

PREREQUISITE: BUE 126 and BUE 128.
CREDIT: Two semester hours.
OFFERED: F

BUE 226. Advanced Dictation and Transcription

Refinement of speed and accuracy in dictation and transcription. Special vocabulary appropriate for legal, medical and technical secretarial positions. Lecture one hour per week, lab two hours per week.

PREREQUISITE: BUE 225 and BUE 220.
CREDIT: Two semester hours.
OFFERED: SP

BUE 227. Secretarial Internship

The student intern will be employed in a secretarial related position in a private industry under the supervision of a coordinator and/or employer.

PREREQUISITE: Second year standing and BUE 126 and BUE 128.
CREDIT: Three semester hours.
OFFERED: F

BUE 228. Professional Typing

Refinement of typing skills with major emphasis on advanced executive, legal, and medical typewriting and procedures. Students may elect to concentrate on one major area or a combination of two from the executive, legal or medical areas. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: BUE 220.
CREDIT: Two semester hours.
OFFERED: SP

BUE 229. Secretarial Internship

This is a continuation of Business Education 227, Secretarial Internship.

PREREQUISITE: Completion of BUE 227 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

BUSINESS LAW

BUL 200. The Legal Environment of Business

Course deals with the legal environment in which business operates. The general areas of study are: the legal framework of business, antitrust law, consumer law, securities law, labor law, and the social environment of business. Specific topics include: the judicial system, the Clayton Act, Sherman Act, FTC, product liability, truth in lending, S.E.C., labor law, and environmental law.

PREREQUISITE: Second year standing.

CREDIT: Three credit hours.
OFFERED: F, SP, SU

BUL 201. Business Law I

A brief survey of the basic principles of law that govern the relations of people both individually and collectively. A consideration of courts and court procedure, the law of contracts, personal property and bailments, and sales contracts.

PREREQUISITE: Second year standing or consent of Division Chairperson.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

BUL 202. Business Law II

This course is a study of legal principles as they relate to people both individually and collectively and to business operations. Topics to be included are partnerships, corporations, real property, estates, government regulations, labor law, and other related topics.

PREREQUISITE: BUL 201.
CREDIT: Three semester hours.
OFFERED: SP

CARPENTRY APPRENTICESHIP

CAP 120. Introduction to Apprenticeship

An introduction to the carpenter's trade including the local apprenticeship program and the responsibilities of an apprentice. The course also includes the labor-management relation, safety, first aid, hand tools, power tools, lumber, scaffolding, rigging, and hand signaling. Lecture, 1.5 hours per week; laboratory, 1.5 hours per week.

PREREQUISITE: None.
CREDIT: 2.5 semester hours.
OFFERED: F

CAP 121. Layout for Carpenters

A course designed to give the student the basic skills of architectural sketching, using the carpenters framing square (R100), and its use in stair layout and framing. Also included is a study of the builders level-transit to be used in site layout, the construction laser, and fasteners. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: CAP 120.
CREDIT: Four semester hours.
OFFERED: SP

CAP 122. Framing I

This course is designed to introduce the student to floor and sill framing, and also including concepts in math for carpenters and blueprint reading for carpenters, wall and partition framing. Lecture, 1.5 hours per week; laboratory, 1.5 hours per week.

PREREQUISITE: CAP 121.
CREDIT: 2.5 semester hours.
OFFERED: F

CAP 123. Concrete Forms

A course designed to provide instruction on various methods of concrete form construction, such as: footing forms, wall forms, edge forms on grade, curb forms, stair forms, deck forms, and beam forms. Also included are concepts in math for carpenters as well as blueprint reading for the carpenter. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: CAP 122.
CREDIT: Four semester hours.
OFFERED: SP

CAP 220. Framing II

This course is designed to introduce the student to roof framing including trusses. Other topics included are various structural timber construction systems, fireproof masonry, and metal and construction. Also included are concepts in math for carpenters and blueprint reading for carpenters. Lecture, 1.5 hours per week; laboratory, 1.5 hours per week.

PREREQUISITE: CAP 123.
CREDIT: 2.5 semester hours.
OFFERED: F

CAP 221. Interior Systems

This course includes interior wall coverings, interior doors and jambs, ceiling systems, and floor coverings. Math for carpenters and blueprint reading for carpenters are also included. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: CAP 220.
CREDIT: Four semester hours.
OFFERED: SP

CAP 222. Exterior Systems

This course includes the materials and their installation commonly associated with the exterior of a building such as: flashing, trim, siding, exterior jambs, and windows. Lecture, 1.5 hours per week; laboratory, 1.5 hours per week.

PREREQUISITE: CAP 221.
CREDIT: 2.5 semester hours.
OFFERED: F

CAP 223. Millwork

This course includes a study of plastic laminates and cabinet making and installation as well as millwork and interior finish. Blueprint reading for carpenters is also included. Lecture, three hours per week; laboratory, two hours a week.

PREREQUISITE: CAP 222.
CREDIT: Four semester hours.
OFFERED: SP

CHEMISTRY

The course descriptions in chemistry include guidelines for the student as to the laboratory time required. The laboratory is an open lab (unscheduled) and is available to the students with an instructor present as posted. The students are expected to plan for time in the laboratory so that the necessary experimental work can be completed.

CHM 100. Introduction to Chemistry

This course surveys the fundamental concepts of general chemistry and includes some organic and biochemistry. A non-mathematical approach is used where possible. The course is intended for non-science majors or as a background for science majors but does not serve as a prerequisite for any advanced chemistry course. Lecture, three hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

CHM 104. Chemistry

This is an introductory course in chemistry suitable as a preparatory course for general chemistry. Basic ideas, terminology, and mathematical skills are emphasized. Concepts of energy, atomic theory and bonding, formulas, nomenclatures, equations, stoichiometry, states of matter, solutions, and some organic chemistry are covered. Lecture, two hours per week; laboratory, three hours per week; seminar, one hour per week.

PREREQUISITE: [illegible]ediate algebra or concurrent enrollment.
CREDIT: Four semester hours.

OFFERED: F, SP, SU

CHM 106. General Chemistry I

This course covers the general principles of chemistry including atomic theory, bonding and molecular geometry, stoichiometry, states of matter, solutions, thermodynamics, and nuclear chemistry. Laboratory emphasizes quantitative work. The course is recommended for students with a year of high school chemistry and at least one and one-half units of algebra and a satisfactory score on the chemistry placement examination. Lecture, three hours per week; seminar, one hour per week; laboratory, three hours per week.

PREREQUISITE: One year of H. S. chemistry and a satisfactory score on the chemistry placement examination or CHM 104.
CREDIT: Five semester hours.
OFFERED: F, SP, SU

CHM 107. General Chemistry II

This course is a continuation of Chemistry 106. Topics include kinetics, equilibrium, acid-base theories, buffers, electrochemistry, coordination chemistry, and an introduction to organic chemistry. Laboratory includes gravimetric, volumetric, electroanalytic, and spectrophotometic methods of analysis. Lecture, two hours per week; seminar, one hour per week; laboratory, six hours per week.

PREREQUISITE: CHM 106.
CREDIT: Five semester hours.
OFFERED: F, SP, SU

CHM 121. Agricultural Chemistry

This is a course designed to give the student a background of chemistry principles and applications of chemistry to the field of agriculture and is for students in the agricultural technology curriculum. Lecture, two hours per week; seminar, one hour per week; laboratory, two hours per week.

PREREQUISITE: Vocational Agriculture Curriculum.
CREDIT: Four semester hours.
OFFERED: SP

CHM 201. Quantitative Analysis

This is a course designed to give the student the theoretical and practical knowledge of gravimetric, volumetric, and instrumental methods of quantitative chemical analysis. Lecture, two hours per week; seminar, one hour per week; laboratory, six hours per week.

PREREQUISITE: CHM 107 or equivalent.
CREDIT: Five semester hours.
OFFERED: Alternate SU

CHM 202. Organic Chemistry I

The course covers the fundamental principles of organic chemistry stressing the preparation, reactions, mechanisms, and structure of organic compounds. Laboratory includes basic techniques in compound purification, synthesis and identification. Hands-on application of infra-red spectroscopy and gas chromatography are utilized in qualitative and quantitative analysis of organic compounds. Lecture, two hours per week; seminar, one hour per week; laboratory, six hours per week.

PREREQUISITE: CHM 107 or the equivalent or consent of instructor.
CREDIT: Five semester hours.
OFFERED; F

CHM 203. Organic Chemistry II

This course is a continuation of Organic Chemistry I and including applications of mechanisms to synthetic reactions, the use of spectral data in the determination of structure and analysis, and natural products. Lecture, two hours per week; seminar, one hour per week; laboratory, six hours per week.

PREREQUISITE: CHM 202 or the equivalent.
CREDIT: Five semester hours.
OFFERED: SP

CHILD CARE

CC 120. Introduction to Child Care

This course is designed to give the student an overview of the field of child care. The course provides knowledge of the developmental characteristics, interests and abilities of the young child which lay the foundation for further study. The various programs for the young child will be examined. The duties and responsibilities of the child care worker will be explored. There will be a focus on the workers' attitudes and skill in working with the child as an individual and in a group setting.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

CC 121. Early Childhood Curriculum: Environment and Management

This course is designed to expose the student to a variety of indoor and outdoor play activities for fine and gross motor development for the young child in various early childhood educational environments. The student will also have the opportunity to learn about classroom management and the process of establishing an environment which encourages positive behavior and interaction. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

CC 123. Practicum I

This course is designed to provide the student with both theory and practice in modern child care centers. Students will engage in supervised participation in child care centers under the direction of a qualified teacher. Students plan and carry out art, music and other learning activities with the children. Individual conferences, written reports, outside reading and seminar sessions are also integral parts of this course. Students are expected to study the behavior of children individually, and in groups, in light of current knowledge in child development. Lecture, one hour per week; laboratory, ten hours per week.

PREREQUISITE: Completion of two semesters in program with a "C" grade average and approval of instructor.
CREDIT: Six semester hours.
OFFERED: F, SP

CC 125. Children's Health

This course provides basic information concerning the healthy physical and emotional development of the child. Included will be information on common childhood ailments and diseases, care for the exceptional child, good nutrition, good safety habits and a knowledge of agencies that contribute to the well-being of children.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

CC 126. Observation in Child Care Programs

The course is designed to help students become familiar with the duties and responsibilities of preschool teachers and aides. Students will observe and assist in a child care program for young children once a week. Students will develop observation techniques and skills, become aware of behavior of young children in group settings, and learn ways to provide an environment that meets the needs of children. Seminar, one hour; laboratory one hour.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F

CC 220. Supervision and Administration of Child Care Program

This course is designed to develop skills in administration and supervision for students who wish to work in early childhood education centers.

Included will be topics such as program planning, selection and use of staff, the role of the administrator and supervisor, administrative tasks, in-service training for staff improvement, and community resources for supplementing the center's services. Planning of facilities, budgeting and purchasing of materials and equipment will also be covered. Students will study the use of microcomputers for the administration of child care programs. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: SP

CC 222. Early Childhood Curriculum: Materials Development and Implementation

The intent of this course is to acquaint the student with the basic curriculum areas in the early childhood center. The student will become actively involved in the creating of materials and activities for a pre-school environment. Students will have the opportunity to study the use of microcomputers and appropriate software in the preschool environment. Coordinating of a program, daily planning and scheduling will also be covered. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

CC 223. Practicum II

This course provides the student with an opportunity to participate as a student child care worker in a child care center, utilizing the skills and techniques and applying the theory previously learned. The student engages in every phase of the child care centers; work in an on-the-job experience under the direction of a qualified person. Individual conferences, reports and projects, supplementary reading and seminar sessions are also integral parts of this course. Lecture, one hour per week; laboratory, ten hours per week.

PREREQUISITE: CC 123.
CREDIT: Six semester hours.
OFFERED: F, SP

CC 224. Child Care Agencies/Laws and Licensing

This course informs the student concerning existing laws and licensing requirements for nursery schools, day care centers and other pre-school programs. The student becomes aware of the relationship between the pre-school teacher and community organizations. Lecture two hours per week.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: SP

CC 225. Art in Early Childhood

This course is designed to give students an understanding of the creative potential of young children. The student will participate in activities using a variety of art media appropriate for use with pre-school children. The student will have the opportunity to learn how to establish a creative environment in the classroom. The student will also learn appropriate methods of presenting art activities to young children.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F

CC 227. Teaching Music in Early Childhood

This course introduces the student to the various areas of music in the pre-school curriculum: singing, listening, use of instruments and creative movement. The student has the opportunity to learn methods of presentation of songs and musical activities. Students also participate in learning to sing children's songs and play the autoharp or omnichord. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: SP

CC 228. Literature in Early Childhood

This course introduces the student to Children's Literature. The student has the opportunity to become familiar with criteria for selecting quality books and stories appropriate to pre-school children. The student will learn methods of incorporating literature into other areas of the pre-school curriculum. The student will also have the opportunity to develop skills in different methods of presentation including reading of stories, flannel board presentations, storytelling and puppets. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: SP

COMPUTERS – COMPUTER LITERACY

CL 101. Computer Literacy

This course follows the history of data processing systems, input-output media, and internal processing characteristics of computers. Word processing and CRT usage are discussed along with software applications. This course is intended to provide a short, non-technical overview of computers and computer usage.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: F, SP

COMPUTERS – COMPUTER SCIENCE

CSI 101. Computer Programming

A beginning course covering the solution of problems using a digital computer. Topics include computer architecture, problem definition, algorithm development, and both numerical and non-numerical applications involving use of a procedure-oriented computer language (FORTRAN).

PREREQUISITE: Math 101.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

CSI 103. Computer Logic

This course covers the classic, symbolic, and mathematical elements of logic and their relation to computers and data processing logic and theory. Emphasis is placed on development of program flowcharts.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F

CSI 104. Assembler Language Programming

Man-machine communication, introductory basic assembly language, input-output, program debugging, housekeeping techniques, flowcharting, program documentation, loops, number systems, architecture, indexes, switches. Lecture, two hours per week; seminar, one hour per week; laboratory, four hours per week.

PREREQUISITE: None.
CREDIT: Five semester hours.
OFFERED: SP

CSI 105. Computers in Business

This course is designed to provide a basic understanding of computers and computer systems within the business organization as used in the decision making process. Specific information processing support tools covered will include: PERT, Linear Programming, Spread sheets, Data Base, Word Processing, Telecommunications, Simulation and Modeling, and Forecasting.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

CSI 201. Computer Programming COBOL

This course is designed to give the

student a comprehensive knowledge of COBOL programming. The student will design, code, compile, and test programs to solve problems similar to those which exist in business.

PREREQUISITE: MTH 101.
CREDIT: Three semester hours.
OFFERED: SP

CSI 202. Programming Systems

Assemblers, compilers, pre-compilers, macro-generators, subroutines, high level languages, and console controls, FORTRAN and COBOL and PLI programming language concepts in a structured approach. Lecture, two hours per week; seminar, one hour per week; laboratory, three hours per week.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: SP

CSI 203. Advanced Programming Systems

Introduction to direct access storage facility, multiprogramming, job stacking environment, teleprocessing on-line real time systems, SORT verb, subprograms and the report writer feature using COBOL in a structured approach. Lecture, two hours per week; seminar, one hour per week; laboratory, five hours per week.

PREREQUISITE: CSI 202.
CREDIT: Five semester hours.
OFFERED: F

CSI 204. PL/I Programming

This course is designed to give the student a comprehensive knowledge of PL/I programming. The student will design, code, compile, and test programs.

PREREQUISITE: Math 101.
CREDIT: Three semester hours.
OFFERED: SP, SU

COMPUTERS - DATA PROCESSING

DP 120. Elementary Computer Concepts

This course is designed to help the layman understand the environment in which automated data equipment is used, exposing him to the associate terminology, processes, and effects. Primarily, this course presents an overview of data processing possible applications, preparation of input and automated equipment and processes.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

DP 121. Data Processing Fundamentals

This course follows the history of data processing systems, input-output media, and internal processing characteristics of computers. Flowcharting and logic, and their relationship to computer programming instruction and development, word processing and CRT usage are discussed.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

DP 123. Computer Operations I

First of a two course sequence designed to provide job entry knowledge for computer operations. Offline, perpherials, and CPU console operation will all be covered in detail. Related topics such as data controls, job control language, operating system fundamentals, and data processing organizations will also be included. Lecture, 2 hours per week, lab 4 hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

DP 124. Computer Operations II

Continuation of Computer Operations I (DP 123). Lecture 2 hours per week, lab 4 hours per week.

PREREQUISITE: DP 123.
CREDIT: Four semester hours.
OFFERED: SP

DP 126. "C" Language and UNIX

The study of C; a general purpose programming language developed by Bell Laboratories. The absence of restrictions and its implementation on the portable operating system, UNIX, makes it more convenient and effective than supposedly more powerful languages. Lecture, two hours per week; lab, two hours per week.

PREREQUISITE: CSI 103, or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

DP 127. Data Entry

This course is designed to introduce students to Data Processing terminology, and basic job tasks associated with terminal operation. The IBM 3277 Online Terminal will be used. Buffered Keypunch, Key Diskette, and Key Verifiers will be studied. Minimum speed level achieved should be 5000 strokes per hour.

PREREQUISITE: Ability to type (preferably 30 words per minute minimum).
CREDIT: Three semester hours.
OFFERED: F, SU

DP 220. Advanced Computer Programming

Advanced BAL, input-output control systems, macro and systems programming, tape (magnetic) and disk programming, tape and disk sorts, tape and disk compilers. Lecture 2 hours per week, seminar 1 hour per week, labs 4 hours per week.

PREREQUISITE: CSI 104
CREDIT: Five semester hours.
OFFERED: F

DP 221. Business Systems Design and Development

All aspects of designing a successful computer system including data processing organization, requirements of a system, data controls, system evaluation and implementation. Operation of an installation is also a part of the system design. Lecture, four hours per week.

PREREQUISITE: CSI 104.
CREDIT: Four semester hours.
OFFERED: SP

DP 222. On-Line Applications

This course is designed to provide knowledge of DOS/VSE in general. Advanced topics of CICS and DL/I will be covered with programming assignments for each. Lecture, one hour per week; seminar, one hour per week; lab, two hours per week.

PREREQUISITE: DP 220 and CSI 202
CREDIT: Three semester hours.
OFFERED: SP

DP 224. Data Processing Applications

Computer applications covered in this course includes both accounting applications (payroll, accounts receivable, etc.) and non-accounting applications (labels, scheduling, etc.). The course includes how computer systems are used in application development.

PREREQUISITE: Some knowledge of Data Processing.
CREDIT: Three semester hours.
OFFERED: SP

DP 225. RPG II and Advanced BASIC

This course is designed to give students a comprehensive knowledge of RPG II and BASIC programming. The students will design, code, compile, and test programs to solve problems with an emphasis in business. Advanced concepts in file organization, tables, and lists will also be covered. Lecture, one hour per week; seminar, one hour per week; lab, three hours per week.

PREREQUISITE: PC 129 or instructor approval.
CREDIT: Three semester hours.
OFFERED: SP

DP 226. Data Processing Field Project

Individual students will be assigned to an area computer center. Work will be program preparation or computer operations, depending on the students program. Students meet one hour per week with instructor and spend 8-10 hours per week on the project.

PREREQUISITE: DP 124 or CSI 203.
CREDIT: Three semester hours.
OFFERED: SP, only for AAS.
SU, only for Operations students.

COMPUTERS - PERSONAL COMPUTING

PC 121. LOGO

LOGO is a procedural and interactive computer language that has been successfully used by preschool thru college level students. Students are able to control the computer in self-directed ways even at first exposure to LOGO. This class provides an ideal starting point in computer programming concepts. Lecture, two hours per week; lab, two hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: On demand.

PC 122. PILOT

PILOT or Programmed Inquiry, Learning or Teaching, is a computer assisted instruction authoring language. Interactive tutorials for classroom use will be developed. Questions, analyzing answers, color graphics, sound effects, and student records are covered. PILOT can be used by people with little programming experience. The class is designed for elementary and secondary teachers. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: On demand.

PC 126. Microcomputer Applications Software

In-depth coverage of the four major microcomputer applications: Spreadsheets, Graphics, Data Base, and Word Processing. Standard packages will be covered in detail.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand

PC 128. Business Microcomputer Systems

This course is a "how to" approach for the first-time computer user. Included topics are: hardware survey, data preparation, applications software, simple programming, telecommunications, and basic systems considerations such as backup, security, user interface, and documentation. Several software packages will be introduced.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand

PC 129. Programming in BASIC

Instruction in BASIC - Beginner's All-purpose Symbolic Instruction Code - language provides a simple and easily understood introduction to personal and business microcomputing. This course features problem solving techniques and verification of problem solutions. Lecture, two hours per week; lab, two hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

PC 227. PASCAL for Problem Solving with A Microcomputer

Modern techniques for solving business or scientific problems using microcomputers will be introduced. These techniques will consist of top-down design, modular design, Pseudo coding, structures programming and bottom-up coding. PASCAL will be used to translate the problem solution into a microcomputer executable form. Lecture, two hours per week; lab, two hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

PC 228. Microcomputer Assembly and Machine Language.

Study of the microcomputer assembly and machine languages. Will bring you as close to a microprocessor as you can get without actually building one yourself. Lecture, two hours per week; lab, two hours per week.

PREREQUISITE: PC 129.
CREDIT: Three semester hours.
OFFERED: On demand.

PC 229. BASIC and Business Applications

Principles of file organization. BASIC programming for creating and maintaining files. Sequential files, random files, tables, and lists are covered. Lecture, two hours per week; lab, two hours per week.

PREREQUISITE: PC 129 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: F, SP

COMPUTERS PERSONAL COMPUTING

Open Entry, Open Exit, Self-Paced

PCA 120. Dollars and Sense™

Dollars and Sense™ is a financial management software program designed to assist the user in organizing personal and small business finances. The program supports entering transactions, establishing and maintaining budgets, capturing year-end tax information. Check writing capability, automatic posting and account maintenance of 100 accounts is provided. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCA 124. THE PROFIT CENTER™ General Accounting

The PROFIT CENTER™ General Accounting provides unique integrated management capabilities for service and retail businesses. The package offers general ledger, accounts receivable, accounts payable and payroll. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCD 120. dBase II™

dBase II is a relational data base program that offers full data base management features and permits the creation of specific applications through using its programming capabilities. The program allows the user to create and update files, generate reports, and create applications complete with formatted entry and output. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCI 122. LOTUS 1-2-3™

LOTUS 1-2-3™ is a software system that combines spreadsheet, graphics, and information management capabilities, creation of database, transformation of database information to spreadsheet, "what if" analysis, and graphical representation are covered. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCL 120. Beginning PASCAL

UCSD PASCAL is a specially designed PASCAL learning environment. Introductory features for writing and mantaining PASCAL programs. Includes

coverage of the p-System operating systems. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCO 120. IBM-PC-DOS

PC-DOS is the operating system for the IBM personal computer. Topics covered include directories, file protection, copy file and disk, edit of files, formatting diskettes, erase files, combined commands. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCS 120. SuperCalc 3™

SuperCalc 3 is a sophisticated electronic spreadsheet. It offers financial functions such as internal rate of return, payments, present and future values. SuperCalc 3 produces high-resolution graphics and provides extensive formatting features. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCW 120. IBM DisplayWrite 2™

An introduction to Word Processing using a microcomputer. The DisplayWrite 2 Program will be used on the IBM PC. Basic text editing features such as inserting, deleting, moving, and copying text will be explored. The advanced functions of Merge, Global Search/Replace, and math will be demonstrated. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCW 121. WordStar™

WordStar is a screen-oriented word processing system. It offers high performance and flexibility, ease of use for the beginner, and power for the professional. The program can be used to write, edit, and revise documents of length. WordStar combines all of the necessary functions to produce error-free professional documents. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

PCW 122. PFS:Write™

PFS:Write is a word processing program that is both uncomplicated and powerful. The program produces error-free documents quickly, allows the computer to function as an electronic note-pad, and displays the document on the screen in its print format. Features include boldfacing, underlining, centering, justification, page headings and footings, page numbering and adjusting page lengths and margins. Individualized instruction - open entry.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: On demand.

CRIMINAL JUSTICE

CRJ 100. Introduction to Criminal Justice

This course is a survey of the historical and philosophical background of criminal justice agencies, and how this background relates to segments of the criminal justice system at the present time. A systems approach is used in this analysis.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

CRJ 103. Juvenile Delinquency

This course deals with juvenile offender theory and the etiology of deviant behavior. Juvenile procedures and alternative dispositions are examined.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

CRJ 107. Introduction to Corrections

This is an introductory course dealing with the philosophy of corrections from arrest through adjudication, correctional facilities, parole, and probation. Changes in corrections will be considered with emphasis upon modern approaches.

PREREQUISITE: CRJ 100.
CREDIT: Three semester hours.
OFFERED: SP

CRJ 121. Police Patrol and Services

This course is a study of the patrol functions as it relates to enforcement problems and the maintenance of social order. The use of police discretion at the patrol and administrative levels are examined.

PREREQUISITE: CRJ 100 or concurrrent enrollment.
CREDIT: Three semester hours.
OFFERED: F

CRJ 124. Investigative Photography

This course is an introduction to photography with emphasis on equipment, supplies, and the techniques of taking black and white and color pictures. The principles of good photographic documentation of evidence will be stressed through actual photographic assignments.

PREREQUISITE: CRJ 100.
CREDIT: Three semester hours.
OFFERED: On demand

CRJ 126. Administration of Justice

This course analyzes what constitutes law and what constitutes crime. The nature of criminal responsibility and the criminal justice mechanism at work are examined.

PREREQUISITE: CRJ 100.
CREDIT: Three semester hours.
OFFERED: SP

Robert Irvine, Criminal Justice Instructor.

CRJ 201. Criminal Investigation

This course will examine the fundamentals of investigation; crime scene applications; the recording, collection and presentation of evidence; investigative techniques and procedures; and follow-up case studies.

PREREQUISITE: CRJ 100.
CREDIT: Three semester hours.
OFFERED: F

CRJ 202. Criminal Law

This course examines the components, the purposes, and the functions of criminal law. The Illinois Criminal Code is studied with emphasis placed upon identifying the elements of various crimes against a person and crimes against property. Students will be exposed to actual cases.

PREREQUISITE: CRJ 203 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: SP

CRJ 203. Evidence and Criminal Procedures

This course examines procedures in the areas of search and seizure, authority to detain, confessions and interrogations, trial and right to have counsel.

PREREQUISITE: CRJ 201.
CREDIT: Three semester hours.
OFFERED: F

CRJ 226. Police Community Relations

This course takes a human relations approach to exploring the complex factors involved in police-community relations. Good relationships between police practitioners and citizens is viewed as the key to positive police-community relations. The case approach to gaining insights and understandings into the police role, police professionalism, use of discretion, and individual rights is utilized in this course.

PREREQUISITE: CRJ 100.
CREDIT: Three semester hours.
OFFERED: SP

CRJ 227. Introduction to Criminalistics

This course is an introduction to scientific analysis; identification, collection, and preservation of physical evidence.

PREREQUISITE: CRJ 201.
CREDIT: Three semester hours.
OFFERED: On demand.

CRJ 228. Criminal Justice Internship

This is a practicum arrangement whereby each student receives credit for work experience in a job which is related to course work in the Criminal Justice area. In addition to learning applications of course material, students will be trained in responsibilities and attitudes. Through planned interrelation of learning experiences in the classroom and on the job, this training strives to make the student initially able to enter the job market. Forty hours work per week required of the interns.

PREREQUISITE: Sophomore standing and/or approval of instructor.
CREDIT: Four semester hours.
OFFERED: SU

CRJ 229. Criminal Justice Seminar

This course is a seminar course in which criminal justice interns will meet with the internship coordinator to discuss their experiences. The seminar will also provide a forum by which the student interns can be assisted with problems and/or areas of concern related to their internship experiences.

PREREQUISITE: Must be taken concurrently with CRJ 228.
CREDIT: One semester hour.
OFFERED: SU

DENTAL ASSISTING

DLA 120. Dental Science I

This course is designed to acquaint the student with head and neck anatomy, oral anatomy, embryology, histology, and morphology.

PREREQUISITE: Admission to the Dental Assisting Program and ZOO 120.
CREDIT: Two semester hours.
OFFERED: F

DLA 121. Dental Materials and Lab Procedures

This course stresses the physical and chemical properties and manipulations of gypsum products, and restorative materials. Lecture, two hours per week; laboratory, four hours per week.

PREREQUISITE: Admission to the Dental Assisting Program.
CREDIT: Four semester hours.
OFFERED: F

DLA 122. Preventive Dentistry

This course is designed to provide the student with basic facts concerning overall health of the oral cavity. Identification of disease, methods of prevention, and nutrition and dietary counseling is included. Personal oral health is stressed. Students will prepare a preventative program for the dental office. Lecture, two hours per week.

PREREQUISITE: Admission to the Dental Assisting Program.
CREDIT: Two semester hours.
OFFERED: F

DLA 123. Pre-Clinical Orientation

This course introduces the students to the responsibilities of the dental assistant. Principles of positioning the patient, instrument identification and transfer, operation of air, water, and high velocity evacuation equipment and basic chairside assisting procedures are stressed. Dental terminology and materials are integrated throughout the course. Lecture, four hours per week; laboratory, four hours per week.

PREREQUISITE: Admissions to the Dental Assisting Program.
CREDIT: Six semester hours.
OFFERED: F

DLA 124. Dental Radiography I

This course consists of the study and practice of exposing radiographs commonly required in dental practice, and includes the processing, mounting, and filing of intro-oral radiographs. Biological effects of radiation and safety measures are emphasized. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: Admission to the Dental Assisting Program.
CREDIT: Two semester hours.
OFFERED: F

DLA 125. Dental Lab Procedures

This course stresses physical properties and applications of metals and waxes used in dentistry. Sharpening of instruments will be studied and practiced in the dental lab. The dental specialties of fixed and removable prosthodontics will be studied, stressing clinical and laboratory properties. Lecture, one hour per week; laboratory, three hours per week.

PREREQUISITE: DLA 121.
CREDIT: Two semester hours.
OFFERED: SP

DLA 126. Clinical Practice

Assignments will be to three clinical stations (private dental offices) to provide practical experience. Seminar, one hour per week; clinical, twenty-five hours a week.

PREREQUISITE: Second semester standing in the Dental Assisting Program.
CREDIT: Six semester hours.
OFFERED: SP

DLA 127. Supervised Dental Assisting Practice

This course gives the student actual clinical experience in four-handed sit-down dentistry. Through supervised clinical practice, an opportunity for developing competence and confidence in the utilization of dental assisting knowledge and skills will be provided to the student. Laboratory, two hours per week.

PREREQUISITE: Enrollment in or successful completion of all first semester DLA courses.
CREDIT: One semester hour.
OFFERED: From mid-semester fall term to mid-semester spring term.

DLA 128. Dental Office Management

Consideration will be given to speech and telephone techniques and communications. Usage of preventive recall systems and controlling the appointment book are covered. Patient clinical records are discussed in terms of preparation, filing, and confidentiality, which is stressed. Financial records, withholding taxes, collection of accounts, and payment of bills will be studied. Lecture, three hours per week.

PREREQUISITE: Admission to the Dental Assisting Program and BUE 107.
CREDIT: Three semester hours.

OFFERED: SP

DLA 220. Dental Science II

This course is designed to acquaint the student with pharmacology, anesthesiology, medical and dental emergencies, oral pathology, oral histology and embryology. Lecture, two hours per week.

PREREQUISITE: DLA 120.
CREDIT: Two semester hours.
OFFERED: SP

DLA 224. Dental Radiography II

This course continues intensified practice in exposure of dental x-ray films and the interpretation of the films. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: DLA 124.
CREDIT: Two semester hours.
OFFERED: SP

DRAFTING

DFM 120. Mechanical Drafting I

A course in mechanical drafting including terms common to an engineering drawing, basic drawing and lettering techniques, and geometrical constructions. Lecture, one hour per week, laboratory, six hours per week.

PREREQUISITE: None.
CREDIT: .5 semester hours.
OFFERED: F

DFM 121. Mechanical Drafting II

A continuation of Mechanical Drafting I including technical sketching, pictorial sketching (isometrics & oblique), and an indepth study of multiview projection. Lecture, one hour per week; laboratory, six hours per week.

PREREQUISITE: DFM 120 or equivalent industrial experience.
CREDIT: One semester hour.
OFFERED: F

DFM 122. Mechanical Drafting III

A continuation of Mechanical Drafting II including sectional and auxiliary views. Lecture, one hour per week; laboratory, six hours per week.

PREREQUISITE: DFM 121 or equivalent industrial experience.
CREDIT: .5 semester hours.
OFFERED: F

DFM 123. Mechanical Drafting IV

A continuation of Mechanical Drafting III including dimensioning (customary system) and multiview projection in the production of a complete set of detail drawings and assembly. Lecture, one hour per week; laboratory, six hours a week.

PREREQUISITE: DFM 122 or equivalent industrial experience.
CREDIT: One semester hour.
OFFERED: F

DFT 121. Advanced Mechanical Drafting

A continuation of the DFM series including advanced principles and applications of dimensioning and tolerancing emphasizing geometrical and positional tolerancing. A study will be made of the requirements for working drawings including detailing and assembly drawings and drawing utilizing the metric system of linear measurement, including dual dimensioning and interchangeability factors. Lecture, one hour per week; laboratory, six hours per week.

PREREQUISITE: DFM series or equivalent.
CREDIT: Three semester hours.
OFFERED: SP

DFT 122. Electronics Drafting

A course in techniques and general drafting with major emphasis on pictorial drawing, device symbols, production drawings, flow and schematic diagrams, printed circuits, miniaturization, industrial controls, and graphic representation. Lecture, one hour per week; laboratory, three hours per week.

PREREQUISITE: Enrolling in Electronics Technology Curriculum.
CREDIT: Two semester hours.
OFFERED: F

DFT 123. Machine Blueprint Reading

Machine blueprint reading is a course designed to progress logically from an introduction to blueprint reading through a study of the fundamental skills and concepts involved in reading, sketching and interpreting drawings. Lecture, three hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

DFT 125. Architectural Drafting

This course is designed to develop an understanding of drafting procedures in the preparation of architectural, civil, and construction drawings. Units of study will include graphic representation of residential and commercial buildings, site analysis, building codes, conventional symbols, spatial concepts, and the use of various materials related to construction. The basis of the course work will consist of the preparation of detail working drawings for construction purposes. Lecture, one hour per week; laboratory, five hours per week.

PREREQUISITE: Consent of instructor.
CREDIT: Three semester hours.
OFFERED: V

DFT 126. Blueprint Reading and Sketching for the Building Trades

A course designed to present concepts and principles involved in building construction with emphasis placed on the reading of architectural prints and sketching construction details.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: V

DFT 127. Welding Blueprint Reading

A course offered for those students enrolled in welding technology, which involves a study of the application of principles of multiview projection as they apply to blueprint reading and sketching. Major areas of study include sketching and shape description, size description, fasteners, types of fabrication prints involving detail drawings, assembly drawings, structural drawings, and terminology as it applies to basic welding and basic machine shop. Lecture, one hour per week; laboratory, five hours a week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

DFT 128. Development and Layout for Welders

A continuation of Welding Blueprint Reading involving the intersection and development of the major geometric shapes including cones, cylinders, prisms, pyramids, and transition pieces. Lecture, one hour per week; laboratory, five hours per week.

PREREQUISITE: DFT 127.
CREDIT: Three semester hours.
OFFERED: SP

ECONOMICS

ECN 100. Consumer Economics

Major emphasis is placed on budgeting, personal expenditures, finances, types of taxes, insurances, investments, and consumer legislation. Emphasis is on understanding the consumer's current role in our society and on ways of dealing with consumer problems.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

ECN 120. Fundamentals of Statistics

This course is designed as a fundamental course in statistics and

presents the basic concepts and methods of using quantitative tools in business. Emphasis is placed on understanding methods and conclusions rather than on computational routine. Topics covered will include methods of data collection and presentation, frequency distributions, probability, hypothesis testing, time series, and index numbers.

PREREQUISITE: BUE 103.
CREDIT: Four semester hours.
OFFERED: SP

ECN 122. Fundamentals of Economics

A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income, conditions of competition, and current economic conditions. Specifically designed for one semester in economics at the undergraduate level.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

ECN 203. Principles of Economics I

An introduction to the major areas of modern economic theory and public policy; national income theory, monetary theory and institutions, economic stability, and taxation.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ECN 204. Principles of Economics II

A continuation of Economics 203. An introduction to market structures, behavior of the firm, consumer demand, the pricing and employment of resources, international economics, and current economic problems.

PREREQUISITE: ECN 203.
CREDIT: Three semester hours.
OFFERED: F, SP

ECN 205. Business Statistics

An introduction of the modern theory and methodology of statistics in the areas of business and economics. Emphasis on frequency distributions, central tendency, probability, sample design, statistical inference, hypotheses testing, index numbers and their construction and use.

PREREQUISITE: MTH 106.
CREDIT: Three semester hours.
OFFERED: F, SP

ECN 220. Money and Banking

This course is designed to give an overview of the nation's financial system, an in-depth presentation of the structure and functions of the Federal Reserve System. Emphasis will also be given to elementary monetary theory, a review of stabilization policy, and the basic areas of international finance and the international monetary system.

PREREQUISITE: ECN 203.
CREDIT: Three semester hours.
OFFERED: F

EDUCATION

EDC 100. American Public School

This course covers the evolution of American education from colonial days to the present. Theories of prominent education are evaluated in relationship to contemporary American needs. Emphasis is placed on school structure, curriculum development, educational leadership, and problems of finance.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

EDC 200. Educational Psychology

This course covers the psychosocial principles underlying educational practices. Theories concerning cognitive and psychosocial development are studied with regard to curriculum, discipline, methodology, and culture. Application involves pre-schoolers, elementary, high school and special students.

PREREQUISITE: PSY 100 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: F, SP

EDC 202. Child Development and Learning

This course is designed to give the future teacher a theoretical and practical basis in dealing with children at various levels. Emphasis is placed on the capacity of a child to benefit from the experience provided by various local elementary schools, high schools and special education programs. This weekly three hour lab experience and seminar involves the application of the principles of both child growth and development and educational psychology.

PREREQUISITE: PSY 100 or concurrent enrollment.
CREDIT: Six semester hours.
OFFERED: F, SP.

ELECTRICITY

ELE 120. Basic Industrial Electricity I

The first in a series of two basic electricity for Industrial Electricians. It includes a study of electricity from its basic nature through resistive circuits with AC and DC voltages applied. Practical applications are emphasized. Necessary mathematics is integrated. Lecture, two hours a week; laboratory, four hours a week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

ELE 121. Basic Industrial Electricity II

A continuation of Basic Industrial Electricity I with the introduction of capacitive and inductive circuit elements. How they react to sinusoidal and unit step voltages. Practical application to industrial type circuits will be emphasized. Necessary mathematics is integrated. Lecture, two hours a week; laboratory, four hours a week.

PREREQUISITE: ELE 120 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: SP

ELE 122. Electrical Machines I

Principles of operation and control of single phase and DC electrical machines, motors and generators, as they related to industrial plant applications. It is recommended that this course be taken concurrently with ELE 124. Lecture, two hours a week; laboratory, one hour a week.

PREREQUISITE: ELE 121 or consent of instructor.
CREDIT: Two and one-half semester hours.
OFFERED: F

ELE 123. Electrical Machines II

Principles of operation and control of three phase electrical motors and generators as they relate to industrial plan applications. It is recommended that this course be taken in conjunction with ELE 125. Lecture, two hours a week; laboratory, one hour a week.

PREREQUISITE: ELE 122 or consent of instructor.
CREDIT: Two and one-half semester hours.
OFFERED: SP

ELE 124. Electrical Schematic Reading I

Interpretation of industrial plant electrical systems schematic diagrams for the diagnosis and repair of faults. It is recommended that this course be taken in conjunction with ELE 122. Lecture, two hours a week; laboratory, one hour a week.

PREREQUISITE: ELE 121 or consent of instructor.
CREDIT: Two and one-half semester hours.
OFFERED: F

ELE 125. Electrical Schematic Reading II

Interpretation of Industrial Plant Electrical Equipment Schematics or the diagnosis and repair of faults. It is recommended that this course be taken in conjunction with ELE 123. Lecture, two hours a week; laboratory, one hour a week.

PREREQUISITE: ELE 121 or consent of instructor.
CREDIT: Two and one-half semester hours.
OFFERED: SP

ELE 126. Electrical Troubleshooting

This course covers methods of finding and correcting faults in sequential process control systems including relay and microcontroller based systems. Lecture, two hours per week.

PREREQUISITE: A knowledge of basic electricity recommended.
CREDIT: Two semester hours.
OFFERED: SP

ELECTRONICS

ET 100. Introduction to Electronics

Designed to cover the electrical knowledge necessary for students who have a background in basic mathematics but who need not have had any background in electricity and who wish to pursue an interest in electronics. The course covers fundamental concepts of electricity, Ohm's Law, batteries, simple electrical circuits, DC compound and bridge circuits, electrical conductors, electromagnetism, alternating currents, inductance, reactance, basic electrical meters, and fundamental operation of vacuum tubes and transistors. Lecture, two hours a week; laboratory, two hours a week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ET 120. Beginning Electronics

Basic theory and construction of semiconductors and tubes; operation and function of vacuum tubes and transistor circuits. Converting alternating current to direct current. Introduction to integrated circuit construction and operation. Lecture, two hours per week; laboratory, one hour per week.

PREREQUISITE: Electricity II or to be taken concurrently.
CREDIT: Two and one-half semester hours.
OFFERED: F

ET 122. Electronic Devices

Introduction to theory of vacuum tubes and transistors. Operation and analysis in basic circuit systems, such as amplification, detection, oscillation, rectification, and control circuits. Introduction to I.C. circuits. Lecture two hours a week; laboratory, four hours a week.

PREREQUISITE: ET 125, ET 126 and MTH 129 or to be taken concurrently or consent of instructor.
CREDIT: Four semester hours.
OFFERED: SP

ET 123. Applied Industrial Electronics

Study of power supplies, electronic timing devices, photo-electronic control and other transducer systems, welding control, SCR and TRIAC control of motor speed; gas type tubes, phase shifting control circuits; introduction to switching and logic circuits. Lecture, two hours per week; laboratory, one hour per week.

PREREQUISITE: Beginning Electronics or equivalent.
CREDIT: Two and one-half semester hours.
OFFERED: SP

ET 125. DC Circuits

Course content will include basic electrical measurements: Ohm's Law, series, parallel, series-parallel, voltage and current dividers. Analysis of circuits with multiple sources using network theorems; including Thevenin's, Norton's Superposition, Kirchoff's Laws and delta-wye transformation, Magnetic fields and devices; time-constant circuits. Lecture, two hours per week; seminar, one hour per week; laboratory, two hours per week.

PREREQUISITE: Entrance requirements to ET Program.
CREDIT: Four semester hours.
OFFERED: F

ET 126. AC Circuits

This course will deal with sine, square and saw-tooth wave-forms applied to resistor capacitor and inductor networks. Operation and function of pulse producing and measuring instruments. Capacitive and inductive reactance, impedance and impedance matching; transformer action. Series and parallel resonance, "Q" of the Circuit. Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: ET 125.
CREDIT: Three semester hours.
OFFERED: SP

ET 220. Linear Circuits

Theoretical and experimental analysis of discrete electronic component design; operation and construction as amplifiers and regulators of linear integrated circuits; methods of interfacing integrated circuits. Lecture, two hours per week; laboratory, four hours a week.

PREREQUISITE: ET 122 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: F

ET 221. Industrial Electronics

Introduction to the basic principles of Industrial Electronics (circuits). Topics covered include gaseous and vapor tubes; control of the thyratron, phototubes and photoelectric devices. Relay and time delay action; solid state devices. Welding control circuits. Basic motor control circuits and systems. Lecture, three hours a week; laboratory, four hours a week.

PREREQUISITE: ET 222 or to be taken concurrently.
CREDIT: Five semester hours.
OFFERED: SP

ET 222. Digital Circuits

This course studies electronic circuits in the area of pulse generation, application and analysis, introduction to basic computer theory, computer circuits, logic circuits, clampers, switching and counter circuits; computer language, the binary system, boolean algebra, and mapping. Digital to analog conversions. Integrated logic system in design and applications. Lecture, two hours a week; laboratory, four hours a week.

PREREQUISITE: ET 220 or to be taken concurrently.
CREDIT: Four semester hours.
OFFERED: F

ET 223. Network Analysis

An in-depth study of the response of resistive, inductive and capacitive passive circuits that contain multiple sources of both D.C. and A.C. sinusoidal voltages. Lecture, three hours a week, laboratory, two hours a week.

PREREQUISITE: ET 125 and ET 126 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: F

ET 225. Shop Processes and Individual Problems in Electronics

The design, layout, packaging and fabrication of electronic equipment. Individual project required. Lecture, one hour a week; laboratory, four hours a week.

PREREQUISITE: ET 221 or concurrent registration.
CREDIT: Three semester hours.
OFFERED: SP

ET 226. Basic Micro-Wave Theory

This course is to provide the basic knowledge of micro-wave theory, instrument and equipment used in micro-wave measurements; study of wave guides; UHF tubes and oscillators, Kylstron; magnetrons, and traveling wave tubes; micro-wave antennas; principles of radar and micro-wave systems. Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: ET 122.
CREDIT: Three semester hours.
OFFERED: As requested.

ET 227. Instruments and Measurements

A study of circuits used in electronic measurements; application, and theory of the circuit used in test instruments; capabilities and limitations of test instruments; leading effects of the instruments. Lecture, one hour a week; laboratory, two hours a week.

PREREQUISITE: ET 122.
CREDIT: Two semester hours.
OFFERED: As requested.

ET 228. FCC License Preparation

A preparatory class for those desiring to obtain their second or first class FCC radiotelephone or telegraph licenses. Review FCC laws and electronic theory needed for successful completion of the required examination. A background in basic electronic theory is necessary for those trying for first and second class licenses. Lecture, three hours per week.

PREREQUISITE: Consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

ENGINEERING

EGR 100. Engineering Graphics I

A course in orthographic projection, auxiliary views, basic principles of descriptive geometry involving point, line and plane relationships, mining and civil engineering problems, concurrent vectors, charts and diagrams, and computer applications to graphics. Lecture, two hours a week; laboratory, four hours a week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

ENGLISH COMPOSITION

ENG 090. Pre-Rhetoric

A catch-up course for students with such serious basic writing problems or who are so out of practice at writing that they need a preparation course before attempting the first composition (ENG 101) or communication (ENG 124/ENG 125) course. Work focuses on framing effective sentences, organizing ideas into unified compositions, supporting related ideas with details, and developing better expression, diction and style. Reviews fundamentals of functions of grammar, usage, and punctuation mechanics. Not a transfer course.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ENG 091. Grammar, Usage and Mechanics

The purpose of the course is to overcome academic deficiencies in the areas of grammar, usage and mechanics Sixteen hours of class attendance are required. Completion of assignments will be determined by test results, informal evaluation. The grade in this course does not count in the student's g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

ENG 092. Sentence Development

This course deals with sentence structure and content, working with clarity, conciseness, and precision, elements not usually approached in English 091, which concerns itself with basic usage forms and sentence mechanics. Sixteen hours of class attendance are required. The grade in this course does not count in the student's g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

ENG 094. Paragraph Development

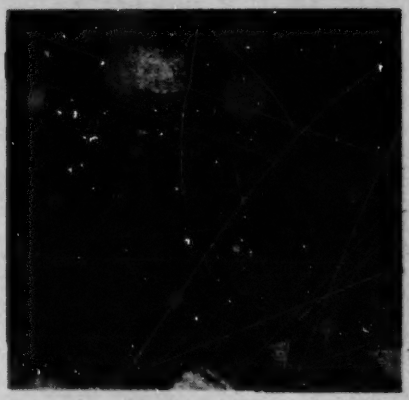
This course teaches the principles of well-developed, coherent paragraphs containing clear, workable topic sentences, adequately ordered and detailed in their enlargement. It is a part of the writing sequence preparing students for English 101 or English 125. The grade in this course does not count in the student's g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

ENG 101. English Composition I

English Composition I is designed to study and apply rhetorical principles of writing in developing effective sentences, paragraphs, and essays, with particular emphasis on writing expository prose.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU



Robert Howard, English and Literature Instructor.

ENG 102. English Composition II

A course designed to introduce students to the major types of literature and to train them in the analysis and discussion and critical evaluation thereof. Emphasis on interpretation and appreciation of fiction, poetry, and drama, and on the writing of interpretive and critical essays and a "long" research essay.

PREREQUISITE: ENG 101
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ENG 120. Grammar for Transcription

A course in the basics of English grammar principally for students enrolled in the secretarial science program. Students will review the basic skills in grammar, punctuation and usage through written exercises, discussion and lecture, workbook assignments, computer assisted instruction, and writing assignments.

PREREQUISITE: None. Open principally to students in secretarial science program.
CREDIT: Two semester hours.
OFFERED: F, SP

ENG 123. Business and Industrial Writing

Designed to meet the specialized writing skills of individual business and industries, the course will tailor each class to specific writing tasks requested by employers. Credit will be assigned appropriately for each section offered, as agreed upon by the college and the business or industry making the request.

PREREQUISITE: None
CREDIT: Variable, one-half to three semester hours.
OFFERED: Arranged

ENG 124. Communications I

A course for students in the various technological areas. Emphasis is placed on the basic principles of communication in observation of

speaking, listening, and reading. A consideration in depth is given to the development of these skills.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ENG 125. Communications II

A course for students in the various technical areas. Emphasis is placed on the basic principles underlying written communications. Consideration of thought and form of expository writing, business letters, and technical writing is stressed.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

ENG 200. Technical and Business Writing

Designed for the student in baccalaureate technical and business programs, this course focuses on the types of on-the-job writing encountered in technical and business areas, emphasizing short and long report writing in the student's major, as well as practical, technical and business everyday written communication such as letters, abstracts, and personnel evaluations.

PREREQUISITE: ENG [illegible]
CREDIT: Three semester hours.
OFFERED: F, SP, SU

Genevieve Gulan, English and Literature Instructor.

FINANCE

FIN 120. Principles of Finance

An introductory finance course dealing with principles of financial management and control. Emphasis will be placed on the areas of financial analysis and return on investment, administration of assets, financial institutions, capital structure and cost of capital, short and long term financing; and short intermediate and long-term debt financing.

PREREQUISITE: ACT 121

CREDIT: Three semester hours.
OFFERED: SP

FIRE SCIENCE

FST 120. Introduction to Fire Production

An examination of the Fire Service, based on past and current practices. Particular emphasis is placed upon the future needs of the Fire Service and the career minded Firefighter.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 121. Fire Hydraulics & Equipment

This course studies the basic properties of pumps, fluids, force, center of pressure, interpretation of reading from various kinds of monometers, pressure gauges, hydrostatic devices, fluids in motion, head calculations, pumping problems, friction loss, velocity of flow, use of pitot and venturi meters, water hammer, and sprinkler discharge rates.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 122. Hazardous Materials

A study of the fundamentals of chemistry and physics as applied to fire control. Classification of hazardous materials; basic laws regulating their use; types, storage, and transportation of chemicals are examined.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 123. Fire Science Apparatus

A study of the basic principles of fire apparatus maintenance and operation. Subjects covered include theory of combustion engines, brake and cooling systems, engine tune up, trouble shooting, and other theoretical and practical application of fire service units.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 124. Rescue Practices

An examination of life-saving practices with respect to the fireman in the company and fire department. Rescue techniques and operations connected with large and small scale disaster requiring civil defense implementation are studied along with first aid techniques and types of diseases that affect breathing.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 125. Fire Suppression

An introduction to fire problems as they relate to building construction, fire protection, hazardous properties of materials, and fixed extinguishing systems. Institutional and Industrial structures, previous to and during construction periods are examined along with the Laws, Codes, and Ordinances affecting such construction.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 220. Fire Administration

An introductory course for fire protection personnel. Topics covered will include fire department records, legal aspects, fire safety problems, and distribution of personnel and equipment.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 221. Fire Prevention

A course dealing with the practical application of techniques, procedures, responsibilities, and organization as applied to fire prevention. The process of organizing fire prevention campaigns, training inspectors, public relations in inspection, and the coordination with other governmental agencies is examined.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 222. Building Construction

A study of building construction as applied to fire science. Types of building material, simple blueprint reading, freehand sketching, fire resistance and flame spread rating floor layout, and case studies are included.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FST 223. Fire Fighting Tactics

An examination of the principles

involved in coordinating fireground problems on company level. Fire situations are presented for analysis and study with accepted practices. Areas involved are: control and extinguishment of structures, waterfront, petroleum projects, chemicals, watershed, brush, grass, and other types of fire.

PREREQUISITE: FST 120 or permission of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

FOOD SERVICES

FS 120. Applied Food Service Sanitation

This course is designed to assist the manager or potential manager of any food service operation to apply food service sanitation. Topics to be included are sanitation and health, sanitary food and food handling, safe food environment, sanitation and the customer, and sanitation management.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: On demand.

FOREIGN LANGUAGES: FRENCH

FEN 100. Conversational French

Introducing the basics of the language with emphasis on speaking and listening skills. An excellent supplement to the regular language sequence(s), since it gives additional practice in basic conversational patterns essential to communication across cultures. Can be taken prior to the regular language sequence(s) - 101 and following - or concurrently with any semester thereof (except 203 Advanced Composition and Conversation). Can also be taken on its own merits for non-language majors, those with non-professional interests, for purposes of tourism, business, cultural exchange, pleasure. Provides basic conversational patterns, idiomatic vocabulary, basic grammar and syntax, and general cultural patterns.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

FEN 101. Elementary French

Emphasis on essentials of French grammar with structure and pronunciation drills in class and the language laboratory. Elementary conversation and reading.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

FEN 102. Elementary French

A continuation of French 101.

PREREQUISITE: FEN 101 or one year of high school French.
CREDIT: Four semester hours.
OFFERED: SP

FEN 201. Intermediate French

Review of French grammar as needed, reading of selected texts, oral and written practice continued in the language laboratory.

PREREQUISITE: FEN 102 or two years of high school French.
CREDIT: Four semester hours.
OFFERED: F

FEN 202. Intermediate French

Continuation of FEN 201.

PREREQUISITE: FEN 201 or three years of high school French.
CREDIT: Four semester hours.
OFFERED: SP

FEN 203. Composition and Conversation

Emphasis on oral and written proficiency, study of idiomatic expression and current usage. Use of language laboratory for preparation.

PREREQUISITE: FEN 202 or three years of high school French (or consent of instructor).
CREDIT: Three semester hours.
OFFERED: F

FEN 204. Survey of French Literature

Selected reading of the best French literary works from the beginning to the present with use of oral and written reports.

PREREQUISITE: FEN 202 or three years of high school French (or consent of instructor).
CREDIT: Three semester hours.
OFFERED: SP

FOREIGN LANGUAGES: GERMAN

GER 100. Conversational German

Introducing the basics of the language with emphasis on speaking and listening skills. An excellent supplement to the regular language sequence(s), since it gives additional practice in basic conversational patterns essential to communication across cultures. Can be taken prior to the regular language sequence(s) - 101 and following - or concurrently with any semester thereof (except 203 Advanced Composition and Conversation). Can also be taken on its own merits for non-language majors, those with non-professional interests, for purposes of tourism, business, cultural exchange, pleasure. Provides basic conversational patterns, idiomatic vocabulary, basic grammar and syntax, and general cultural patterns.

PREREQUISITE: None
CREDIT: Three semester hours
OFFERED: F, SP, SU

GER 101. Elementary German

A study of the basic structures of grammar, conversation, pronunciation, and composition. Selected reading. Language laboratory is required.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

GER 102. Elementary German

Continuation of German 101.

PREREQUISITE: GER 101 or one year of high school German.
CREDIT: Four semester hours.
OFFERED: SP

GER 201. Intermediate German

This course includes review and further study of grammar concepts, continued oral practice, simple conversation and selected readings. Laboratory practice is required.

PREREQUISITE: GER 102 or two years of high school German.
CREDIT: Four semester hours.
OFFERED: F

GER 202. Intermediate German

Continuation of German 201. Laboratory practice is required.

PREREQUISITE: GER 201 or three years of high school German.
CREDIT: Four semester hours.
OFFERED: SP

James Michael, German and English Instructor.

GER 203. Composition and Conversation

Composition and conversation based on variety of readings; modern German

authors, newspapers and magazines, and selected short texts to illustrate points of grammar.

PREREQUISITE: GER 202 or three years of high school German (or consent of instructor).
CREDIT: Three semester hours
OFFERED: F

GER 204. Survey of German Literature

Continuation of German 203.

PREREQUISITE: GER 203 or three years of high school German (or consent of instructor).
CREDIT: Three semester hours.
OFFERED: SP

FOREIGH LANGUAGES: SPANISH

SPN 100. Conversational Spanish

Introducing the basics of the language with emphasis on speaking and listening skills. An excellent supplement to the regular language sequence(s), since it gives additional practice in basic conversational patterns essential to communication across cultures. Can be taken prior to the regular language sequence(s) - 101 and following - or concurrently with any semester thereof (except 203 Advanced Composition and Conversation). Can also be taken on its own merits for non-language majors, those with non-professional interests, for purposes of tourism, business, cultural exchange, pleasure. Provides basic conversational patterns, idiomatic vocabulary, basic grammar and syntax, and general cultural patterns.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

SPN 101. Elementary Spanish

Study of the fundamentals of the language necessary for the understanding, speaking, reading, and writing of Spanish. Practice in pronunciation from dialogues and pattern practices. All students are required to work in the language laboratory.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

SPN 102. Elementary Spanish

Continuation of Spanish 101.

PREREQUISITE: SPN 101 or one year of high school Spanish.
CREDIT: Four semester hours.
OFFERED: SP

Steve Hibben, Spanish Instructor.

SPN 201. Intermediate Spanish

Development of ability to speak Spanish through conversational exercises. Development of listening habits through films, filmstrips, tapes, and records. Improvement of reading ability and writing skills. Review of skills acquired in previous courses in Spanish. Review and expansion of grammar patterns.

PREREQUISITE: SPN 101 and 102 or two years of high school Spanish.
CREDIT: Four semester hours.
OFFERED: F

SPN 202. Intermediate Spanish

Development of ability to speak Spanish through conversational exercises. Development of listening habits through films, filmstrips, tapes and records. Improvement of reading ability and writing skills. Review of skills acquired in previous courses in Spanish. Review and expansion from a variety of grammar patterns. Practice becomes more intensive and students are expected to achieve a level of Spanish closer to that of a native speaker.

PREREQUISITE: SPN 201
CREDIT: Four semester hours.
OFFERED: SP

SPN 203. Composition and Grammar

An advanced level composition and conversation course based upon a cultural approach. Grammar is reviewed extensively. There is an introduction to reading advanced Spanish selections, literacy and otherwise.

PREREQUISITE: SPN 202 or three years of high school Spanish or consent of instructor.
CREDIT: Three semester hours.
OFFERED: F

SPN 204. Survey of Spanish Literature

Study of representative Spanish authors and their work.

PREREQUISITE: SPN 202 or three years of high school Spanish (or consent of instructor).
CREDIT: Three semester hours.
OFFERED: SP

SPN 205. Survey of Spanish-American Literature

Study of representative authors of Latin-American countries and their works.

PREREQUISITE: SPN 202 or three years of high school Spanish (or consent of instructor).
CREDIT: Three semester hours.
OFFERED: SP

GENERAL TECHNOLOGY

GNT 110. Industrial Production Techniques

This course is designed to meet the needs of industry and industrial employees for specialized education experiences. Each class will be individualized to a particular set of needs and a credit value assigned for each section offered. Typical examples include inspection and measuring techniques, tool set-up, and machine operation techniques. This course may be repeated for a maximum of six semester hours.

PREREQUISITE: None.
CREDIT: Variable, one-half to three semester hours.
OFFERED: As requested.

GNT 120. Technical Orientation

This course provides an overview of industrial organization so that the student, as an employee, understands how companies are organized and where the employee fits into the organization. In addition, the decision making process in industry is studied.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: V

GEOGRAPHY

GEG 090. The Earth's Geography

A basic geographic study in understanding how man lives on the physical earth. Emphasis is upon weather elements, map reading, agriculture and industry, the earth in the solar system and man's population in relation to land and sea masses. Lecture, two hours a week; seminar, one hour a week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: V

GEG 101. Physical Geography I

An investigation into place location,

earth-sun relationships and the earth's atmosphere. Emphasis will be placed upon the composition and dynamics of the earth's atmosphere and the world's climates. Weather and climatic phenomena will be interpreted and applied to daily living. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F, SP

GEG 102. Physical Geography II

An investigation into place location and the origin and development of the earth's surface. Environmental problems, stream action, glaciation, mountain building, soil and vegetation relationships, and coastal development will be studied. Emphasis will be placed upon crustal and landform development. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F, SP

GEG 103. Cultural Geography

The emphasis is on man, his origins, development, and world-wide distribution. How and where did man emerge from pre-history, from the forest to the garden, then to the city, and on to moon and space? Man will be studied by comparing his similarities and differences within and among geographic areas, especially nations and continents. Lecture, two hours per week; seminar, one hour per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

GEG 104. World Regional Geography

The study of landform distribution and how man has attempted to impose his will upon continents. Climatic variations, diversity of landforms, distribution and significance of hydrographic features, ever-varying political patterns, resource distribution, and industrial utilization are studied regarding their similarities and differences within and between nations and continents. Lecture, two hours per week; seminar, one hour per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

GEG 105. Introduction to Astronomy

Astronomy, one of mankind's oldest intellectual pursuits, continues to both intrigue and awe man, even after 5,000 years. This course is designed to meet the needs of those students who merely have a cursory interest in the Where, What, and How of cosmic phenomenon such as the Sun, Moon, Planets, Stars, Meteors, Comets, and Constellations. Also, we will speculate on the Why and When of Black Holes, and the possibility of Life in Space. Weather permitting, we will have laboratory sessions on stellar observational equipment and techniques. Lecture, two hours per week; laboratory, two hours per week; seminar, one hour per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F, SP

GEG 107. Planetary & Space Science

A survey of space and time, exploring past, present, and future development of our universe and solar system. Subjects included are sun, moon, planets, stars, meteors, comets, constellations, galaxies, quasars, and blackholes. Astronomy, being interdisciplinary science, will also cover concepts dealing with biology, geology, and religion. (For non-geography/geology majors.)

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

GEOLOGY

GEL 108. Physical Geology

An introduction to the study of the Earth as it is carried on by geologists today. Geological principles and processes dealing with geomorphology, crustal movements, rock and mineral identification, volcanism, and sedimentation are some of the topics covered. Experience in aerial photo and topographic map interpretation is provided in laboratory exercised. Lecture, two hours a week, seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F, SP

GEL 109. Historical Geology

An introductory study into the origin and structure of the earth. Emphasis will be placed on North American, dealing with the growth of continents, and mountain building. A study of evolution changes occurring in plant and animal life as documented by fossil remains. Interpretation of geologic forces by means of topographic maps and geologic colios. Field trips are an integral part of the course. Lecture, two hours a week; seminar, one hour a week; laboratory, three hours a week.

PREREQUISITE: GEL 108.
CREDIT: Four semester hours.
OFFERED: SP

HEALTH, PHYSICAL EDUCATION AND RECREATION

HPR 100. Wellness

A course designed to help the student understand wellness as a way of life designed to promote the highest level of health, fitness, and well-being possible during all the years of the individual's life.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: F, SP

HPR 101. Wellness Lab

A course designed to help the student appraise his/her own level of physical fitness as it applies to the total concept of wellness. Each student will write and actively take part in a personal fitness program. Laboratory, two hours per week.

PREREQUISITE: HPR 100, or concurrent enrollment in HPR 100.
CREDIT: One semester hour.
OFFERED: F, SP

HPR 103. Personal and Community Hygiene

This course includes a study of community health problems caused by pollution, communicable diseases and chronic illness. It considers personal problems caused by malnutrition, drugs and emotional illness. Current developments in health science are discussed. One lecture and one seminar per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F, SP, SU

HPR 104. First Aid

A course designed to provide the student with knowledge and skills needed in most situations when emergency first aid care is needed and medical assistance is not excessively delayed. Students passing the course will receive American National Red Cross Certification in Standard First Aid and Personal Safety.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F, SP

HPR 107. Introduction to Recreation

This course serves as an introduction to the field of Recreation. It covers the history of the Recreation and Parks movement; the nature of the recreation experience and its importance to the individual; the influ-

ence of leisure on society; and the scope of Recreation Service Delivery Systems on a public, private, voluntary, and commercial level.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

HPR 108. Principles of Camping

This course covers the history of the organized camping movement and the operation of organized camps today; the skills and equipment needed for enjoyable and safe camping; and current issues and trends in the field of organized camping. The course includes an overnight camping trip.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

HPR 109. Introduction to Therapeutic Recreation

An overview of the field of Therapeutic Recreation: the history, philosophy and concepts, characteristics of the social populations served, settings for Therapeutic Recreation Service, and the examination of the various roles performed by the Therapeutic Recreation Professional.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: V

HPR 121. Recreation for Older Adults

Study of the organization and administration of Recreation programs for older adults. The course includes a survey of programs for Seniors in a variety of settings. The concepts of aging as a biological and social process will be explained. Course emphasis is on program development, staff training, activity adaption, and program evaluation.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: V

HPR 200. Professional Orientation

A course designed to teach the appreciation of sports, recreation, health, and safety in modern life. Required for students majoring in physical education. Lectures and recitations, two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F

HPR 201. Coaching of Basketball

A course in the fundamentals of basketball with emphasis on offensive and defensive skills, techniques, history of the game. Lectures and recitations two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: SP

HPR 202. Coaching of Football

A course in the fundamentals of football with emphasis on skills, rules and strategy.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: SP

HPR 203. Coaching of Baseball

A course in the fundamentals of baseball with emphasis on offensive and defensive skills, knowledge of the rules, training and practices, officiating techniques, history of the game. Lectures and recitations two hours per week.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: SP

HPR 204. Officiating Football

A course providing instruction in the rules of and techniques for officiating football.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: F

HPR 205. Officiating Basketball

A course providing instruction in the rules of and techniques for officiating basketball.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: SP

HPR 206. Officiating Baseball and Softball

A course providing instruction in the rules of and techniques for officiating baseball and softball.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: SP

HPR 207. Officiating Volleyball

A course providing instruction in the rules of and techniques for officiating volleyball.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: F

HPR 208. Physical Education Activities for Elementary School Children

A course designed to present the activities involved in physical education for elementary school children. Progression within the activities and techniques of organization will be included.

PREREQUISITE: None
CREDIT: Two semester hours
OFFERED: F

HISTORY

HIS 100. History of Western Civilization I

An introductory course dealing with an analysis of the political, economic, social and cultural events and achievements of Western Civilization. The course begins with early man and ends with the Middle Ages. Special emphasis will be placed on early man, Sumer, Egypt, Greece, Rome and the Middle Ages.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

HIS 101. History of Western Civilization II

An introductory course dealing with an analysis of the political, economic, social and cultural events and achievements of Western Civilization. The course begins with the Renaissance and ends with the aftermath of World War II. Special emphasis will be placed on such developments as the Renaissance, the Reformation, the Enlightenment, the French Revolution, World War I, World War II and its aftermath.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

HIS 110. Study of Utopian Societies

A study of man's concepts of the ideal society. The course will consist of a brief historical perspective of utopian societies, a utopian work to be read each week, appropriate films and class discussion.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: On demand.

James Hostetter, History and Psychology Instructor.

HIS 200. United States History to 1865.

This course is designed to give students an understanding of the history of the United States to 1865. It does this through a consideration of: European background, the Age of Exploration and Colonization, the American Revolution, the Articles of Confederation and the Constitution, Jeffersonian Democracy, Jacksonian Democracy, and the coming of the Civil War.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

HIS 201. United States History from 1865

This course is designed to give students an understanding of the history of the United States from 1865 to the present. It does this through a consideration of: Reconstruction, the period 1876 to 1900, American Imperialism, the Progressive Era, Woodrow Wilson and World War I, the Roaring Twenties, the New Deal, World War II, and 1945 to the present.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

HOME ECONOMICS

HOM 100. Nutrition

This course deals with the basic scientific principles of nutrition, the application of these principles to the maintenance of optimum health, and the adaptation of the normal diet for prevention and treatment of disease.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

HOM 101. Food Preparation

An examination of the theory and practical application of principles of food preparation. Nutrient retention of foods subjected to various storage and preparation procedures are also considered.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

HOM 102. Family Living

An analysis of the contemporary American family, placing emphasis on the family interactions which largely dictate the child's behavior and way of relating to people. Included is knowledge of other cultures and our past family history to better understand present day conditions and family trends. Varying life styles are also of concern.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

HOM 103. Personal Development

A study of one's personality, habits, and ability to project into the world of today. Appropriate attire, adjusting to the demands of society, and an awareness of these and other factors in getting and keeping a job are considered.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

HOM 104. Beginning Clothing

This course concerns itself with basic fundamentals of the selection of fabrics and patterns, fitting, and clothing instruction techniques; and is designed for the student with little or no sewing experience.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

HOM 105. Clothing Construction

This course is for students with sewing experience. More difficult patterns, fabrics, and construction techniques will be used.

PREREQUISITE: HOM 104 or its equivalent.
CREDIT: Three semester hours.
OFFERED: On demand.

HOM 120. Nutrition for the Young Child

This course reviews the basic scientific principles of nutrition and the application of these principles to the special needs of the growing infant, toddler, and pre-school child.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: SP

HUMANITIES*

HUM 101. Appreciation through Art

This course presents to the non-major a broad appreciation of and familiarity with the basic concepts and materials of the visual arts, as well as a brief history of world art.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: F, SP

HUM 102. Appreciation through Music

How to listen to and appreciate music; the art of music and its materials; instruments and musical forms. Covers two historical periods of music--Classical and Romantic. Includes listening, lecture, discussion.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP

HUM 103. Appreciation through Theatre

An Appreciation of theatrical production, through study, observation, and critical analysis, designed to reveal the theatre as a necessary human activity.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F. SP

HUM 104. Readings in Fiction

This course is designed to acquaint the student with some masterpieces of fiction. The student will learn the pleasures of reading closely and appreciating the subtleties of the narrative art.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP

HUM 105. Readings in Logic

This course concentrates upon the practical application of logical principles and methods to the recognition, analysis, evaluation, and construction of arguments in natural language.

PREREQUISITE: None
CREDIT: One semester.
OFFERED: F, SP

HUM 106. Readings in Drama

An introduction to a selection of masterpieces in drama. Emphasis on careful reading, analysis, and appreciation of individual works; limited to world drama produced in the nineteenth and twentieth centuries.

PREREQUISITE: None
CREDIT: One semester.
OFFERED: F, SP

HUM 107. Special Topics in the Humanities and Fine Arts

A study of timely and specific problems in the humanities and fine arts (art, drama, foreign languages, literature, music, philosophy, theatre) presented from an interdisciplinary view through directed readings, discussion, projects, or field trips. Specific topics vary from term to term.

PREREQUISITE: None

CREDIT: One semester
OFFERED: F, SP

* The courses listed as HUM have been designed to meet the Humanities requirements of specific programs for the A.A.S. degree. While any student may enroll in these courses for overall elective credit, please be advised that none meets the general education Humanities requirement for the A.A. or A.S. degree. Each course usually meets two hours per week for eight weeks.

James Jewell, Speech Instructor.

INDUSTRIAL MECHANICS

IM 120. Equipment Maintenance I

Emphasis will be placed on industrial equipment and basic principles applicable to it. Measurement, force weight, mass and conversion ratios, tension, compression, bending and torque. Principles of clutches and brakes, types and use, lubrication and lubricants and rigging. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: SP

IM 121. Equipment Maintenance II

Power transmission, including gear reducers, chain and belt drives, gearing, ratios and proportions, levers and mechanical advantage, couplings, friction, bearings, kinds and uses. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: IM 120 or equivalent.
CREDIT: Two semester hours.
OFFERED: F

IM 122. Introduction to Electro-Mechanics

A survey of basic concepts in electro-mechanics as they apply to the work of an industrial electrician. Areas to be covered will include: force, torque, energy, electrical conduction, radiation, light measurement, electro-mechanical transducers of heat, sound, and light. Lecture, two hours per week.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F

IM 221. Control Instrumentation

A study of the instruments, circuits, and applications of automatic, mechanical, temperature control. Lecture, three hours per week; laboratory, three hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

INSURANCE

INS 120. Principles of Insurance

This course is designed as a broad introduction to the areas of insurance. Emphasis is placed on the nature and purpose of insurance, insurance and the law, types of insurance, types of insurers, and regulation of the insurance industry.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

INS 121. Life & Health Insurance

This is an introductory level course designed to familiarize students with the basics of life and health insurance. Topics covered will include the economic bases of life and health insurance, types of life and health insurance, group policies, business uses of life insurance and structure of the life and health insurance industries.

PREREQUISITE: INS 120 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: On demand

INS 122. Property and Casualty Insurance

This course is designed to introduce the basic concepts of property and casualty insurance. Principles involved in covering different exposures to financial loss are emphasized. Also covered are policies and forms traditional in the United States insurance industry. Methods of packaging and effects on insurance coverage are presented to give a complete understanding of principles and procedures.

PREREQUISITE: INS 120 or consent of instructor.
CREDIT: Three semester hour.
OFFERED: On demand.

JOURNALISM

JRN 101. Introduction to Mass Media

A survey of the historical, sociological, economic, political and intellectual contexts of the media and a brief introduction to news writing. Emphasis on criticisms and challenges to newspapers, magazines, radio, television, and films.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

JRN 102. Reporting

Instruction and practice in the skill of reporting, journalistic ethics, writing copy for the mass media.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: SP

JRN 103. Advanced Reporting

This course presents the instruction, practice, and laboratory experience in advanced techniques of reporting; with emphasis on public affairs, interpretations, and investigation. Lecture, two hours a week; laboratory, two hours a week.

PREREQUISITE: JRN 103
CREDIT: Three semester hours
OFFERED: V

LITERATURE - AMERICAN

* LIA 203. Survey of American Literature to 1855

Survey of American Literature from the Colonial Period to 1855. A consideration of representative major writers, the significance of their contributions and influence. Attention also to the social, economic, and political milieu and influences upon literature.

PREREQUISITE: ENG 101 and 102. (May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: F, SP, SU

* LIA 204. Survey of American Literature from 1855

A continuation of the survey described for LIA 203 from 1855 to the present. survey of American Literature from 1855 to the present. A consideration of representative major writers, the significance of their contributions and influence. Attention also to the social, economic, and political milieu and influences upon literature.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: F, SP, SU

LITERATURE - ENGLISH

* LIE 201. Chief English Writers I

A study of the principal works and writers of England from the Anglo-Saxon period to 1700, with special attention to political, social, and philosophical background.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: three semester hours.
OFFERED: F, SP, SU

* LIE 202. Chief English Writers II

A continuation of the subject and material offered in Chief English Writers 201, beginning with writers of the eighteenth century and concluding with the twentieth.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: SP, SU

Robert Mueller, English and Literature Instructor, Assistant Football Coach.

LIE 205. An Introduction to Shakespeare I

A consideration of the development of Shakespeare's dramatic genius through a study of selected comedies, tragedies, and chronicles.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: F, SU

LIE 206. An Introduction to Shakespeare II

A continuation of the subject material offered in An Introduction to Shakespeare 205, with special emphasis on the great tragedies and the later comedies.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: SP, SU

LITERATURE - GENERAL

* LIG 201. Masterpieces of European Literature I

Survey of European literature from the ancient Greeks to the Renaissance. Consideration will be given to major representative writers and the significance of their contributions. Literary, social, historical, and philosophical backgrounds will be included.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: F, SU

* LIG 202. Masterpieces of European Literature II

Survey of European literature from the neoclassical period to the twentieth century. Consideration will be given to major representative writers and the significance of their contributions. Literary, social, historical, and philosophical interrelationships, problems, and issues will be included.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: SP

LIG 203. Mythology

The classical myths of Greece and Rome; their nature origins, interpretations, influence, relevance, and use in the modern world. Designed to enable the student to more fully appreciate and understand the use of classical mythology in literature, art, and music.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: SP, SU

LIG 205. Introduction to Fiction

Designed to acquaint the student with a selection of masterpieces of fiction. The emphasis will be on pleasures and subtlety of the details and narrative artistry contained in the novels and short stories of the 19th and 20th centuries. The course is less a historical survey than an intense appreciation of individual works of art.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: F, SP, SU

LIG 206. Science Fiction

A study of a major type of "popular literature", the course closely investigates the creation of futuristic fiction, its techniques and forms. Extensive reading in both short stories and novels will develop student's abilities to understand how such literature contributes to the western literary tradition. Two sci-fi movies are included in order to study this literature in a popular medium.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

LIG 207. Drama and Poetry

A study of major plays from the ancient Greek to the present day, plus a survey of the major types of poetry.

PREREQUISITE: ENG 101 and 102.
(May be taken concurrently with ENG 102 upon consent of the division chairperson).
CREDIT: Three semester hours.
OFFERED: V

* NOTE: Those courses so marked (*) meet the general education Humanities requirement for the A.A. and A.S. degrees

MANAGEMENT

MGT 123. Owning and Operating a Small Business

A realistic approach to how and why small business succeed or fail. The pitfalls of business that lead to bankruptcy and how to overcome them. Small business as part of the total community and the need for full participation on the part of small business. How to determine the price of goods and services and yet be competitive in a price conscience world.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

MGT 201. Principles of Management

A study of the nature and functions of management as well as the concepts, skills, and techniques used in this field.

PREREQUISITE: Students enrolling management should have second year standing or business experience, or consent of instructor.
CREDIT: Three semester hours.
OFFERED: F, SP

MGT 221. Personnel Management

A study of the principles and procedures associated with the management of human resources in the business environment.

PREREQUISITE: MGT 201.
CREDIT: Three semester hours.
OFFERED: On demand.

MGT 222. Principles of Supervision

A practical introduction to first line supervision. Emphasis will be given to appropriate topics including: leadership, organization, selection and evaluation of employees, safety and employee motivation.

PREREQUISITE: MGT 201 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: On demand.

MARKETING

MKT 101. Principles of Marketing

An introductory course in fundamentals of marketing, the nature of competition, basic marketing problems, and policies of business organizations and the planning of marketing.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

MKT 122. Salesmanship

A study of the fundamentals and techniques of successful selling. Included are such topics as: the place of the salesman in society, and in our competitive economy; developing the sales personality; and the "Selling Cycle". Emphasis is placed on creative selling, and the salesman's obligation to himself, his organization, and to his customer. Students develop demonstration and sales projects.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

MKT 221. Principles of Advertising

A study of current trends and recent research in advertising. Planning, creation, and use of advertising and how it relates to the economy and marketing. Evaluation of newspaper, radio, television, outdoor, specialty advertising and direct mail to find the most economical and effective method of delivering the message to the desired market.

PREREQUISITE: MKT 101.
CREDIT: Three semester hours.
OFFERED: F

MKT 223. Principles of Retailing

A basic course designed to give students a broad understanding of principles, methods, policies, problems, and functions of retailing. The development and present status of the retailing structure. Consideration of organization and operations of retail stores and services establishment of various types.

PREREQUISITE: MKT 101.
CREDIT: Three semester hours.
OFFERED: SP

MKT 227. Marketing Internship

This is a practicum arrangement whereby each student receives credit for work experience in employment which is related to course work in the Marketing area. In addition to learning applications of course material, students will be trained in responsibilities and attitudes required by business. Through planned interrelation of learning experiences in the classroom and on the job, this training strives to make the student initially able to enter the job market at the Mid-Management level. Fifteen hours work per week required of the interns.

PREREQUISITE: Twenty-eight hours in the Marketing program to include MKT 101, and MKT 122.
CREDIT: Three semester hours.
OFFERED: F

MKT 228. Marketing Internship

This is a continuation of the practicum begun in Marketing Internship 227. Fifteen hours work per week required of the interns.

PREREQUISITE: MKT 227 (or consent of instructor).
CREDIT: Three semester hours.
OFFERED: SP

MATHEMATICS

Proper placement in mathematics courses will be determined by the student's mathematical background and by a placement test. Therefore, when planning programs and mathematics course selection, it is important to check course prerequisites including placement exam requirements as listed with the course description.

MATHEMATICS - COLLEGE PREPAKEDNESS

MTH 094. Arithmetic

This course is designed for those students who would like a review of arithmetic before beginning the Basic Algebra course or for those who would like to improve their arithmetic skills. Topics to be studied include numeration, whole numbers, fractions, decimal numerals, percent, exponents, ratio, and proportion. An individualized study approach is used. Grade in this course is not computed in g.p.a. for graduation.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

MTH 097. Basic Algebra

This is the first course in Algebra. Topics of study include: linear and quadratic equation, literal and quadratic expressions and polynomials, algebraic fractions, factoring, graphing, systems of equations, radicals and exponents. An individualized study approach is used. Grade in this course is not computed in g.p.a. for graduation.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

MTH 098. Basic Geometry

This is the beginning course in geometry. Topics of study include algebraic and geometric sets, angles, triangles, quadrilaterals, circles, congruence relations, similarity, basic constructions, area, surface area, and volume of selected solids. Emphasis is on applying knowledge of geometry relations to solve problems rather than on rigorous development of geometric relations. An individualized approach is used. This course is not used in computing g.p.a. for graduation.

PREREQUISITE: MTH 097 or equivalent.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

MATHEMATICS

MTH 100. Fundamentals of Mathematics

Intended as a survey course for those students interested in developing an appreciation of the role of mathematics and mathematical methods in contemporary thought. Emphasizes the understanding and application of mathematics. The course includes the study of logic, probability statistics, and other selected topics such as consumer math, linear programming, metric measurement, computer topics, sets, and number systems. This

Russell Greene, Mathematics Instructor.

course does not serve as the prerequisite for any other mathematics course.

PREREQUISITE: One year of high school algebra or equivalent (MTH 097). Proficiency exam available.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

MTH 101. Intermediate Algebra

For those students who want to acquire a better understanding of the basic algebraic concepts and to improve their manipulative skills before advancing to more complex mathematical concepts. Topics to be studied include: fundamental algebraic operations, linear, quadratic, and higher-degree equations, systems of equation, radicals, and logarithms. The students may choose a traditional lecture class or an individualized approach where they progress at their own rates. Credit will not be given for both this course and MTH 102.

PREREQUISITE: One year of high school algebra and plane geometry or the equivalent (MTH 097 and 098). Satisfactory score on the placement examination.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

MTH 102. Intermediate and College Algebra

This course covers topics that are normally included in Intermediate Algebra and the College Algebra course. Credit is not given for both this course and for MTH 101 or MTH 103 or MTH 105. Students with less than a B average in Basic Algebra should take MTH 097 or MTH 101.

PREREQUISITE: One year of high school algebra or MTH 097 and one year of high school geometry or MTH 098 with grades of B or better. Satisfactory score on the placement exam.
CREDIT: Five semester hours.
OFFERED: F, SP

MTH 103. College Algebra

This course is primarily for students who need to continue on in mathematics. Topics of study include review of fundamental algebraic operations, radicals, systems of equations, higher degree equations, inequalities, absolute value, logarithms, matrices, determinants and the binomial theorem. Credit is not given for this course and for MTH 102 or MTH 105.

PREREQUISITE: Three semesters of high school algebra and two semesters of high school geometry or the equivalent (MTH 098 and 101). Satisfactory score on the placement exam.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

MTH 104. Trigonometry

This course is primarily for students who need to continue on in the study of mathematics. Topics of study include the trigonometric functions and their graphs, identities, trigonometric equations, and practical applications. Credit is not given both for this course and for MTH 105.

PREREQUISITE: Three semesters of high school algebra and two semesters of high school geometry or the equivalent (MTH 098 and 101).
CREDIT: Two semester hours.
OFFERED: F, SP, SU

MTH 105. Precalculus

This course covers the same topics as in College Algebra (MTH 102 or 103) and Trigonometry (MTH 104) with emphasis on functions approach and curve sketching. It is recommended for students planning to take the calculus sequence but have not met the prerequisites. Credit is not given for this course and for MTH 102 or MTH 103 or MTH 104.

PREREQUISITE: Three semesters of high school algebra and two semesters of high school geometry, or the equivalent (MTH 098 and 101). Satisfactory scores on the placement exam.
CREDIT: Five semester hours.
OFFERED: F, SP

MTH 106. Finite Mathematics

This course is intended for students in business, social science, and other areas in which a knowledge of the mathematics of probability, matrices, linear programming and their applications is required.

PREREQUISITE: MTH 103 or MTH 102, or the equivalent. Satisfactory score on the placement exam.
CREDIT: Four semester hours.
OFFERED: F, SP

MTH 107. Calculus for Business and Social Sciences

This course is for students who need a basic understanding of differential and integral calculus but do not need the more rigorous traditional calculus sequence. Applications in the fields of business and social sciences are stressed.

PREREQUISITE: MTH 102 or MTH 103, or the equivalent. Satisfactory score on the placement exam.
CREDIT: Four semester hours.
OFFERED: F, SP, SU

Dean Riley, Mathematics and Physical Education Instructor; Head Men's Basketball Coach.

MTH 200. Calculus & Analytic Geometry I

This course is the first in a three semester sequence of analytic geometry and calculus. Topics include: real numbers, lines, circles, conics, functions, limits, derivative and anti-derivative with applications, transcendental functions and the definite integral with applications.

PREREQUISITE: MTH 105 or 103 and 104, or 102 and 104, or the equivalent and satisfactory score on placement test or consent of instructor. (Proficiency exam available.)
CREDIT: Five semester hours.
OFFERED: F, SP

MTH 201. Calculus & Analytic Geometry II

Topics include the definite integral and applications, techniques of integration, polar coordinates, indeterminate forms, improper integrals, conics, Taylor polynomials, sequences, series, and vectors in a plane.

PREREQUISITE: MTH 200 or the equivalent.
CREDIT: Five semester hours.
OFFERED: F, SP

MTH 202. Calculus and Analytic Geometry III

Topics include: three dimensional vectors, parametric equations, analytical geometry, partial differentiation, and multiple integrals.

PREREQUISITE: MTH 201.

CREDIT: Three semester hours.
OFFERED: F, SP

MTH 205. Introduction to Numerical Methods and Fortran Programming

The course includes the description of scientific computers and the fundamentals of the Fortran IV programming language applied to problems in science and engineering. Analysis and coding of problems involving roots of equations, large systems of simultaneous equations, numerical differentiation and integrated topics. In-house computing facilities are used for processing students programs.

PREREQUISITE: Credit or concurrent enrollment in MTH 201 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

MTH 206. Linear Algebra

Vector spaces, linear combinations, simultaneous equations, determinants, matrices, linear transformations, matrix algebra and other selected topics are required.

PREREQUISITE: Completion of or concurrent enrollment in MTH 201.
CREDIT: Three semester hours.
OFFERED: F

MTH 207. Differential Equations

Solution of ordinary differential equations of the first order and higher order with constant co-efficients by exact methods, some equations with variable co-efficients, an introduction to partial differential equations. Applications of all topics to problems arising in engineering and the physical sciences are studied.

PREREQUISITE: MTH 202 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

MATHEMATICS – TECHNICAL

MTH 120. Metric & English Measurement

This course is designed for those students who need to study the English and Metric units of measurement and how they are related. Topics to be studied include linear measure, weight measure, volume measure, temperature measure, area and volume in English and Metric units. An individualized study approach is used .

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F, SP, SU

MTH 123. Mathematics for Industry

A study of positive and negative numbers, square roots, powers of numbers, ratio and proportion, weights and measures, conversion of units, elements of algebra, practical geometry and trigonometry. Emphasis is on the use of mathematics to solve problems encountered on the job.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

MTH 127. Technical Mathematics

This course includes topics in algebra, basic geometry and trigonometry; complex numbers, the use of tables and graphs. It is oriented, where practical, towards typical industrial problems.

PREREQUISITE: Algebra I (one year of high school algebra or MTH 097) with a grade of C or better.
CREDIT: Five semester hours.
OFFERED: F, SP, SU

MTH 128. Applied Mathematics I

This course includes topics in algebra and trigonometry; vectors, tables and graphs. It is oriented, where practicable, towards typical technical problems.

PREREQUISITE: MTH 101 or MTH 127 or equivalent, with grade of C or better.
CREDIT: Five semester hours.
OFFERED: F, SP

MTH 129. Applied Mathematics II

This course is a continuation of MTH 128 and includes topics from analytic geometry, advanced vector analysis; logarithms and exponential functions, differential and integral calculus. The graphical analysis of differential and integral calculus is stressed. The course is oriented, where practicable, towards typical technical applications.

PREREQUISITE: MTH 128, MTH 103 & MTH 104, or MTH 105 with a grade of C or better.
CREDIT: Five semester hours.
OFFERED: SP

MECHANICAL ENGINEERING TECHNOLOGY

EDT 128. Statics & Strength of Materials

This course begins with an introduction to the basic principles involved in the solution of problems involving forces acting on static structures. Topics include: vectors, moments, trusses and friction. With that foundation, the course proceeds to apply those principles to the analysis and design of simple structures and machines. Emphasis is placed on the selection and sizing of materials to fulfill a given function. Topics in this part of the course include simple and combined stresses, bolted joints, torsion and horsepower, and beam and column design. Lecture, three hours per week; laboratory, four hours per week.

PREREQUISITE: MTH 128 or equivalent.
CREDIT: Five semester hours.
OFFERED: SP

EDT 220. Machine Design I

Expanding upon the basic principles in EDT 128, this course offers more complex applications and presents additional material germane to the design of structures and machines. Topics include indeterminate beams, eccentrically loaded beams and joints, curved beams, thick-walled cylinders, press and shrink fits, spring rates, fatigue, and failure theories. Lecture, two hours per week; laboratory, four hours per week.

PREREQUISITE: EDT 128 and MTH 129 or equivalent.
CREDIT: Four semester hours.
OFFERED: F

EDT 221. Machine Design II

The design principles of certain machine components are studied with calculations made in determining the size and shape of these components. Factors influencing the selections of material is included, along with the environment of application. Attention is given to manufacturer's data in selecting machine components. Lecture, two hours a week; laboratory, two hours a week.

PREREQUISITE: DFT 121 and EDT 220.
CREDIT: Three semester hours.
OFFERED: SP

Burdette Boers, Engineering Design Technology Instructor.

EDT 224. Mechanisms

This course deals with the study of

existing mechanisms and their motion characteristics, as well as the application of this study to the design of mechanisms to provide desired motion characteristics. Attention is given to such mechanisms as the four-bar, slider, crank, scotch yoke, quick-return, pantography, intermittent motion, cams, gears, belts, etc. In the motion study, absolute and relative velocities, accelerations and the use of instant centers are presented. Cam layout is presented in detail as well as the nomenclature and kinematics of gearing. Lecture, two hours per week; laboratory, six hours per week.

PREREQUISITE: DFT 121 and MTH 129 or equivalent.
CREDIT: Four semester hours.
OFFERED: F

EDT 225. Computer Aided Engineering

This course introduces the student to the microcomputer and its role in modern industry. Beginning with a description of computer structure, terminology, and peripherals the subject matter proceeds from the generation of simple geometric figures to the production of a complete machine drawing and the application of available software toward the solution of typical engineering design problems. Emphasis is placed on the development of computer user skills rather than on programming proficiency. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: Enrollment in the Mechanical Engineering Technology Program or consent of the instructor.
CREDIT: Three semester hours.
OFFERED: F, SU

EDT 226. Design Technician Internship

Individual students will be assigned to an engineering department in local industries. Work will be that normally performed by a design technician. Students meet one hour per week with instructor and spend 15 hours per week on the job.

PREREQUISITE: EDT 221 or concurrent enrollment.
CREDIT: Four semester hours.
OFFERED: SP

EDT 227. Computer Aided Design I

This is an introductory course in the operation of an automated drafting system (CADAM) widely used in various industries. Extensive hands-on terminal operation affords the student experience in creating basic geometric figures, orthographic views, and assembly drawings using software resident in the college's main-frame computer. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: DFT 121 or Industrial drafting experience.
CREDIT: Three semester hours.
OFFERED: F

EDT 228. Design Projects

This course will give the student the opportunity to apply the knowledge and training achieved in preceding courses in an "on-the-job" situation. Assignments will consist of analysis of problems, synthesis, preliminary design and layout, which will involve application of principles learned in related subject areas, and the final set of working drawings. Lecture, one hour per week; laboratory, nine hours per week.

PREREQUISITE: EDT 221 or concurrent enrollment.
CREDIT: Four semester hours.
OFFERED: SP

EDT 229. Computer Aided Design II

This is a follow-on to EDT 227 and introduces the student to advanced features of the CADAM automated drafting system including isometric views, section properties, special notes, and advanced analysis. Particular attention is given to the solution of problems arising at the student's place of employment pertaining to the incorporation of engineering changes in existing designs. Lecture, one hour per week; laboratory, four hours per week.

PREREQUISITE: EDT 227.
CREDIT: Three semester hours.
OFFERED: SP

MECHANICAL TECHNOLOGY

MT 120. Industrial Electricity

This course covers basic theory which governs the design, operation, application, and testing of electrical and electronic components, devices, and controls in modern industry. Elementary electrical, electrostatic, magnetic, and electronic circuitry problems relating to instruments, AC and DC systems and electro-mechanical machines are solved in both the traditional way and with the aid of computer techniques. Lecture, three hours per week; laboratory, two hours per week.

PREREQUISITE: Concurrent enrollment in MTH 128 or equivalent.
CREDIT: Four semester hours.
OFFERED: F

MT 121. Materials of Industry

The study of metals, their physical properties and composition. Included in the course are topics coverings: material selection, SAE and AISI coding, physical testing, destructive and non-destructive testing, heat treating, and machineability. Non-metals are also covered. Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: Concurrent enrollment in MTH 128.
CREDIT: Three semester hours.
OFFERED: F

MT 122. Manufacturing Processes I

This course is designed to provide a base of knowledge covering two major areas of manufacturing: foundry and welding. Areas covered include: processes, process selection, cost determination, and casting and weldment design. This course is performance based. Lecture, two hours per week.

PREREQUISITE: Concurrent enrollment in MTH 128.
CREDIT: Two semester hours.
OFFERED: F

MT 123. Fundamentals of Numerical Control

In this course the student will learn the basics of numerical control. They will, by the end of the semester, have a knowledge of the purpose, type of machines, controls, and control programming; a study of computerized controls, computer aided programs and NC terms.

PREREQUISITE: MT 121, MT 122, MTH 128 and MTL 120.
CREDIT: Two semester hours.
OFFERED: SP

MT 220. Methods and Operations Analysis

A systematic study of methods, materials, tools and equipment for the purpose of finding the most economical way of doing work. This course is performance based and individualized instruction. Lecture, three hours per week; laboratory; three hours per week.

PREREQUISITE: MTH 128 or equivalent, or consent of instructor.
CREDIT: Four semester hours.
OFFERED: F

MT 221. Statistics & Quality Control

A course designed to cover sampling inspection techniques, use of inspection tools and instruments, construction and interpretation of control chart. Lecture, two hours a week; laboratory, three hours a week. This course is performance based.

PREREQUISITE: MTH 129 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: SP

MT 223. Process Planning

A study of fundamental principles, practice, and methods of process planning. Additional activities

include operation selection, equipment selection, and tool selection. Lecture, three hours per week; laboratory, three hours per week. This course is performance based.

PREREQUISITE: MTH 129 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: SP

MT 224. Introduction to Fluid Power

This course is designed to safely introduce all components, circuits, and principles commonly used in industry, and to fully acquaint the student with principles of fluid power. Practical working circuits with many variations have been developed to demonstrate machine behavior and malfunctions as they actually happen. Electro-mechanical exercises tie machine fluid power and electrical behavior together for industrial understanding. This course is competency based instruction. Lecture, three hours per week; laboratory, three hours per week.

PREREQUISITE: MTH 129.
CREDIT: Four semester hours.
OFFERED: F

MTL 120. Manufacturing Processes Lab I

This course is designed to provide laboratory experiences covering the various manufacturing materials and fundamental types of manufacturing methods as they are employed in the metal working industries. This course is required in the Manufacturing Technology curriculum. Competency based objectives will be used throughout the course. Laboratory, nine hours per week.

PREREQUISITE: Enrollment in MT 122.
CREDIT: Three semester hours.
OFFERED: F

MTL 121. Manufacturing Processes Lab II

This course is designed to provide laboratory experiences covering the various manufacturing materials and fundamental types of manufacturing methods as they are employed in the metal working industries. This course is required in the Engineering Design Technology curriculum. Competency based objectives will be used throughout the course. Laboratory, three hours per week.

PREREQUISITE: Enrollment in MT 122.
CREDIT: One semester hour.
OFFERED: SP

MTL 122. Manufacturing Processes Lab III

This course is designed to provide laboratory experiences covering the various manufacturing materials and fundamental types of man manufacturing methods as they are employed in the metal working industries. This course is required in the Manufacturing Technology curriculum. Competency based objectives will be used throughout the course. Laboratory, nine hours per week.

PREREQUISITE: Enrollment in MT 123.
CREDIT: Three semester hours.
OFFERED: SP

MTL 123. Manufacturing Processes Lab IV

This course is designed to provide labortory experiences covering the various manufacturing materials and fundamental types of manufacturing methods as they are employed in the metal working industries. This course is required in the Robotics Application Technology curriculum. Competency based objectives will be used throughout the course. Laboratory, three hours per week.

PREREQUISITE: Enrollment in MT 123.
CREDIT: One semester hour.
OFFERED: SP

MECHANICS – THEORETICAL AND APPLIED MECHANICS

TAM 203. Theoretical and Applied Mechanics

This course employs a vector approach to statics and dynamics. The topics covered include resultants of force systems; algebraic and graphical methods of resolution; analysis of forces acting on members of trusses, frames, etc.; friction, centroids, kinematics or particles and rigid bodies; moments of inertia; kinetics of particles and rigid bodies; solution of kinetics problems by methods work, energy, impulse and momentum; mechanical vibrations.

PREREQUISITE: C or better in Physics 109 and registration in MTH 202.
CREDIT: Five semester hours.
OFFERED: F

METALS

MET 120. Inspection and Gaging

Inspection and gaging covers in a concise manner many phases of inspection work and their applications to present day manufacturing operations. The course covers a variety of manual and automatic measuring devices and gages, their specific function and specialized techniques of application. In addition, it analyzes the methods and duties of the different types of inspectors. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: Understanding of basic mathematics.
CREDIT: Two semester hours.
OFFERED: F

MET 121. Numerical Controlled Machine Programming

An introduction to N/C programming. Material covered will include: manual programming, the history of N/C, the wide variety of tape equipment available, the basic ideas of coding systems, axis notation, tapes, and type punching equipment. Lecture, one hour per week; laboratory, five hours per week.

PREREQUISITE: MET 122, or to be taken concurrently, or consent of instructor.
CREDIT: Three semester hours.
OFFERED: V

MET 122. Metal and Metalworking

Introduction to metal-working tools to include a basic familiarity with the function of shop equipment including lathes, milling machines, etc., and their adaptability to metal-working. Course will also include familiarization with sheet metal layout work and the tools used to form and bend sheet metal. Lecture, two hours per week; laboratory, four hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: V

MET 123. Fabrication

This course will be an elaboration of previous subjects to include plate fabrication, pipe fabrication, and uses of structural components used in machinery and platforms. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: MET 122 or equivalent.
CREDIT: Two semester hours.
OFFERED: V

MET 129. Welding Metallurgy

This course examines the factors important in the weldability of metals. It is concerned with the behavior of metals and alloys under the thermal and mechanical environments found in welds. Lecture, three hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

MICRO-PROCESSOR/COMPUTER TECHNOLOGY

CET 120. Introduction to Microprocessor

A hands-on introduction to microprocessor programming using machine level instructions. The use of numbering systems, logical thinking

and flow-charting is used in conjunction with an 8085 microprocessor single board training system to develop a solid understanding of microprocessor operation. Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

CET 221. Motion and Process Control

This course describes motion and process control as accomplished with a computer system. Intel's PDS 100 development system with analog/digital, input/output interfacing is used as a laboratory model. Lecture, two hours per week; laboratory, six hours per week.

PREREQUISITE: ET 222, CET 224.
CREDIT: Five semester hours.
OFFERED: SP

CET 224. Microprocessor Interfacing

An introductory course to machine level programming and interface circuitry using Intel's SDK 85 single board development system. Lecture, three hours per week; laboratory, three hours per week.

PREREQUISITE: None.
CREDIT: Four semester hours.
OFFERED: F

CET 226. Microprocessor Systems

A course that describes how a microprocessor is interfaced to peripheral devices to form a computer system. The 8085 microprocessor and Intel's PDS 100 computer system is used as a laboratory model. Troubleshooting with the aid of digital probes, logic state analyzers and micro-system testers is emphasized. Lecture, two hours per week; laboratory, six hours per week.

PREREQUISITE: ET 222, CET 224 or concurrent with maintenance & repair of computers.
CREDIT: Five semester hours.
OFFERED: SP

MUSIC: APPLIED

MUP 101. Collegiate Chorale: Standard Literature or Swing

A course in the understanding and enjoyment of music. Musical examples studied through selections from standard or swing choral literature. Laboratory, three hours per week. May be repeated three times.

PREREQUISITE: High school choral experience.
CREDIT: One semester hour.
OFFERED: F, SP

MUP 102. Chamber Singers

A select group which specializes in studying and performing music written especially for choral ensembles. Lecture, one hour per week; laboratory, one hour per week. May be repeated for a maximum of four hours credit.

PREREQUISITE: Audition, consent of instructor, and concurrent enrollment in MUS 101-102.
CREDIT: One hour each semester.
OFFERED: F, SP

MUP 103. Wind Ensemble

Designed primarily to provide performance opportunities for student with high school band experience. The music selected is written primarily for the Wind Ensemble which is a small wind and percussion performing organization. The ensemble performs in concert three times annually, and provides, on a volunteer basis, pep band music for football and basketball games. Laboratory, three hours per week. May be repeated for a maximum of four hours credit.

PREREQUISITE: High school band experience, and consent of instructor.
CREDIT: One hour each semester.
OFFERED: F, SP

MUP 104. Jazz Ensemble

A study of style and techniques in the jazz idiom. The course is open to all wind instrument players in addition to piano, guitar, and trap drum players. Rehearsals are twice weekly, one hour and fifteen minutes each. May be repeated for maximum of four hours credit. Lecture, one hour per week; laboratory, one hour per week.

PREREQUISITE: Performance ability on a wind instrument, piano, guitar, or trap drum.
CREDIT: One semester hour.
OFFERED: F, SP

Bill Hall, Music Instructor.

MUP 105. Class Piano

Beginning group instruction in piano, designed primarily for music majors whose major instrument is not piano. Non-music majors may be admitted with the consent of the Division Chairperson, if space is available. An elementary course including the study of simple piano literature and the development of skills in techniques, sight reading, harmonization, transposition, and analysis. May be repeated to total four semester hours. Laboratory, two hours.

PREREQUISITE: Music major or consent of division chairperson.
CREDIT: One semester hour.
OFFERED: V

MUP 201. Applied Music Instrumental

Individual instruction for serious music students whose principal performing medium is piano, guitar, organ, orchestral or band instrument. Emphasis on technique, literature, and performance; proficiency requirements at each level. One hour per lesson per week. May be repeated to a maximum of four (4) semester hours. Concurrent enrollment in one of the College instrumental groups recommended.

PREREQUISITE: Music major or audition.
CREDIT: One semester hour.
OFFERED: F, SP, SU

MUP 202. Applied Music Vocal

Individual instruction for music students whose principal performing medium is voice. Emphasis on technique, literature and performance, with proficiency requirements at each level. One hour lesson per week. May be repeated to a maximum of four (4) semester hours. Concurrent enrollment in one of the College vocal groups recommended.

PREREQUISITE: Music major or audition.
CREDIT: One semester hour.
OFFERED: F, SP, SU

MUP 203. Collegium Musicum

A group organized for the purpose of learning and continuing to learn to play recorders, viola-da-gamba, harpsichord, crumborns and other instruments in the college's collection. Ensembles will be formed according to interest and ability and performances will be given at the Madrigal Dinner in the fall and in the spring. Medieval, Renaissance and Baroque music will be studied.

PREREQUISITE: Consent of instructor.
CREDIT: One semester hour.
OFFERED: F, SP

MUSIC: HISTORY & THEORY

MUS 100. Introduction to and History of Music

This course will teach the understanding of music as related to the other arts and sciences. It is divided into two activities: the study of music fundamentals and listening to examples as correlated with examples in music history. It covers periods of history through contemporary times. It will reinforce perception of a particular quality in familiar music and widen perception of a particular quality in unfamiliar music.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

MUS 106. Music Theory I

Intensive training in musicianship through the study of sight singing, rhythmic and melodic dictation, chord recognition and keyboard harmony. Harmony and analysis; a study of the basic principles involved in eighteenth and nineteenth century musical composition. Lecture, three hours per week; laboratory, two hours per week.

Note: It is recommended that music majors be concurrently enrolled in both applied music and a performance group.

PREREQUISITE: None
CREDIT: Four semester hours.
OFFERED: F

MUS 107. Music Theory II

A continuation of Music 106. Intensive training in musicianship through the study of sight singing, rhythmic and melodic dictation, chord recognition and keyboard harmony. Harmony and analysis; a study of the basic principles involved in eighteenth and nineteenth century musical composition. Lecture, three hours per week; laboratory, two hours per week.

Note: It is recommended that music majors be concurrently enrolled in both applied music and a performance group.

MUS 110. Elements of Music for the Non-Music Major

This course will teach how to read music, play a piano, sing, read a leadsheet, chord, and accompany. Students will study notation, scales, rhythm, intervals, and musical terminology. Excellent course for elementary education majors, also recommended for music minors and music majors showing a deficiency in musical background.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: SP, SU

MUS 206. Music Theory III

A continuation of Music 107. Intensive training in musicianship through the study of sight singing, rhythmic and melodic dictation, chord recognition and keyboard harmony. Harmony and analysis; a study of the basic principles involved in eighteenth and nineteenth century musical composition. Lecture, three hours per week; laboratory, two hours per week.

Note: It is recommended that music majors be concurrently enrolled in both applied music and a performance group.

PREREQUISITE: MUS 107
CREDIT: Four semester hours.
OFFERED: F

MUS 207. Music Theory IV

A continuation of Music 206. Intensive training in musicianship through the study of sight singing, rhythmic and melodic dictation, chord recognition and keyboard harmony. Harmony and analysis; a study of the basic principles involved in eighteenth and nineteenth century musical composition. Lecture, three hours per week; laboratory, two hours per week.

Note: It is recommended that music majors be concurrently enrolled in both applied music and a performance group.

PREREQUISITE: MUS 206.
CREDIT: Four semester hours.
OFFERED: SP

MUS 209. Introduction to Music Education/Field Experience

An examination of current philosophies and practices in music education to provide students with perspectives and directions in the classroom. Field experience through direct observation in public schools helps students examine curriculum and methodology. A seminar plus thirty hours in music classrooms for all music education majors is provided thorough directed supervised observation in a variety of educational settings.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: Arranged

NURSING

NUR 120. The Role of the Licensed Practical Nurse

This course provides an introduction to the role and responsibilities of the LPN. Emphasis is placed on the legal, ethical implications of nursing practice. Specific concepts that will govern the LPN in practice are discussed. Current trends, an introduction to institutional health care, and health team relationships are explored.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F

NUR 121. Fundamentals of Nursing I

An introductory course in nursing. The content focuses on scientific principles and basic clinical skills necessary for implementing basic therapeutic nursing measures. Campus laboratory experience provides opportunity to develop dexterity and a degree of proficiency in applied nursing procedures. Through supervised practice in the clinical area, the student is given the opportunity to provide patient care using newly acquired knowledge and techniques of basic nursing procedures. Lecture, one and one-half hours per week; college laboratory, one and one-half hour per week; clinical laboratory, three hours per week including clinical conference

PREREQUISITE: Admission to the nursing curricula and concurrent enrollment in or prior completion of A-H 120, 122 and ZOO 107
CREDIT: Three semester hours.
OFFERED: F

NUR 122. Fundamentals of Nursing II

A course in nursing fundamentals building upon and expanding knowledge and skills acquired in Fundamentals of Nursing I. Scientific principles and clinical skills increase in complexity. Campus laboratory experience focuses on continued development of dexterity and proficiency of techniques. Supervised practice in the clinical area provides students the opportunity to implement their knowledge and skill in giving direct patient care. Lecture, one and one-half hours per week; college laboratory, one and one-half hours per week; clinical laboratory, three hours per week including clinical conference.

PREREQUISITE: Successful completion of NUR 121. Concurrent enrollment in or prior completion of A-H 120, 122, ZOO 107.
CREDIT: Three semester hours.
OFFERED: F

NUR 123. Theories & Concepts Basic to Nursing

An introductory course in nursing focusing on concepts of nursing relating to identifying human needs in health and illness. Emphasis is placed on communication skills, the application of the nursing process as a framework for the therapeutic nursing measures, the recognition of moral problems nurses encounter together with reasonable approaches

to bring these problems to closure.

PREREQUISITE: Admission to one of the nursing curricula and con current enrollment in or prior completion of required non-nursing courses.
CREDIT: Two semester hours.
OFFERED: F

NUR 124. Nursing Care of Children

This module focuses on the role of the nurse in holistic child health care as influenced by physical, psychosocial, and environmental factors. The nursing process, principle of growth and development, and Maslow's hierarchy of needs serve as a basis to promote optimum health. Clinical experience is centered about preventive, therapeutic, and rehabilitative measures of the common health problems seen in children (infant through adolescent). Accountability and standards of maternal-child health nursing practice as set forth by the American Nurses' Association are expected of all students. Lecture, one and on-half hours per week; clinical laboratory, four and one-half hours per week including clinical conference and discussion of related topics.

PREREQUISITE: A-H 120, 122; ZOO 107, 108; NUR 121, 122, 123
CREDIT: Three semester hours.
OFFERED: SP

NUR 125. Nursing Care of the Childbearing Family

A study of the nursing needs of individuals as they relate to reproduction and childbearing. Experience is given in preventive, supportive and therapeutic care with special emphasis in clinical areas of obstetrics in the hospital and community facility. Accountability and standards of maternal-child health nursing practice as set forth by the American Nurses' Association are expected of all students. Lecture, one and one-half hours per week; clinical laboratory, four and one-half hours per week including clinical conference and discussion of related topics.

PREREQUISITE: A-H 120, 122; ZOO 107, 108; NUR 121, 122, 123
CREDIT: Three semester hours.
OFFERED: SP

NUR 129. Practical Nursing for Common Problems

Theory and practice of practical nursing functions in relation to the person who is suffering from a variety of common health problems. Experience is provided in nursing homes, hospitals and other health agencies. Lecture, two hours per week; seminar, two hours per week; laboratory, ten hours per week.

PREREQUISITE: A-H 120, 122; NUR 121, 128, 120 or 123; ZOO 120 or 107; HOM 100; with a minimum grade of "C" in each of the above. Concurrent enrollment or completion of NUR 124 and 125.
CREDIT: Nine semester hours.
OFFERED: SP

NUR 220. Holistic Physical and Mental Nursing I

This module is constructed around the basic human needs of an individual throughout the life cycle and the anxiety that arises from threats to his self-esteem. Incorporated into this module is an emphasis on prevention, detection, and treatment of mental health in an in-patient, out-patient, and/or community mental health setting. An in-depth study and application of principles of interpersonal relationships is designed to enable the student to develop therapeutic nurse/patient relationships with adult psychiatric patients who demonstrate varying degrees of emotional health/illness. Accountability and standards of psychiatric nursing practice as set forth by the American Nurses' Association are expected of all students. Lecture, three hours per week; clinical laboratory, six hours per week including clinical conference and/or related topics.

PREREQUISITE: NUR 121, 122, 123; A-H 120, 122; ZOO 108; PSY 100. A minimum grade of C is required for each prerequisite course.
CREDIT: Five semester hours.
OFFERED: F

NUR 221. Holistic Physical and Mental Nursing II

The focus of this module is the nursing care of clients/patients with problems related to the endocrine, neuromusculoskeletal, and integumenta systems. Students are provided the opportunity to utilize the nursing process, nursing skills and theoretical knowledge in related clinical situations. Accountability and standards of nursing practice as set forth by the American Nurses' Association is expected. Lecture, three hours per week. Clinical laboratory, six hours per week including clinical conference and/or related topics.

PREREQUISITE: NUR 121, 122, 123; A-H 120, 122; ZOO 107, 108; PSY 100 with a minimum grade of C.
CREDIT: Five semester hours.
OFFERED: F

NUR 222. Holistic Physical and Mental Nursing III

The entire module will center around the nursing process which is a framework for action that guides a nurse's practice when a problem with the cardio-pulmonary system is identified and intervention is considered and implemented. Legal issues that are relevant to medical-surgical nursing practice will be incorporated as well as the standards for practice set forth by ANA. Lecture, three hours per week; clinical laboratory, six hours per week including clinical conferences and/or related topics.

PREREQUISITE: NUR 121, 122, 123; A-H 120, 122; ZOO 107, 108; PSY 100. A minimum grade of C is required for each prerequisite course.
CREDIT: Five semester hours.
OFFERED: SP

NUR 223. Holistic Physical and Mental Nursing IV

The focus of this module is the nursing care related to the digestive, genito-urinary, and reproductive systems and to the cancer patient. The student is given the opportunity to utilize the nursing process, nursing skills, and theoretical knowledge of relaxed clinical situations. Accountability and standards of nursing practice as set by the American Nurses' Association are expected of all students. Lecture, three hours per week; clinical laboratory, six hours per week including clinical conferences and/or related topics.

PREREQUISITE: NUR 121, 122, 123; A-H 120, 122; ZOO 107, 108; PSY 100. A minimum grade of C is required for each prerequisite course.
CREDIT: Five semester hours.
OFFERED: SP

NUR 224. Issues in Professional Nursing

This course is concerned with the current issues and trends in the practice of nursing and the delivery of health care. Emphasis is on the transition of student nurse to graduate nurse and analytical skills of moral reasoning are presented in order that the nurse will be able to adopt a moral point of view and make and defend considered moral judgments. The Illinois Nurse Practice Act and ethical issues in nursing are discussed.

PREREQUISITE: Completion of first year nursing curriculum or licensure as a Registered Nurse.
CREDIT: Two semester hours.
OFFERED: SP

NUR 225. Nursing Process

This course is designed to enhance the knowledge and skill of the working nurse in a realistic practical application of the nursing process. The nurse is expected to use assessment tools and care plans presently used in the clinical area. Time will also be given to evaluate the effectiveness of these tools based on discernibly needed information in the clinical setting.

PREREQUISITE: Sophomore status or completion of R.N.

CREDIT: Two semester hours.
OFFERED: V

NUR 226. Health Assessment for Nurses

This course is designed for second semester, second year nursing students and R.N.'s who wish to develop or improve their assessment skills. Assessment will be made in a holistic manner including the physical, mental, social and spiritual spheres with the most emphasis being placed on the physical aspect of health. The nursing process will be utilized up to and including the formulation of nursing diagnoses.

PREREQUISITE: NUR 221 or R.N. Status.
CREDIT: Two semester hours.
OFFERED: V

NUR 229. Intensive Cardiac Care Nursing

A continuing education course for the nurse who wishes to improve her knowledge and skills for the care of the acutely and/or critically ill person with cardiac disease. Lecture, three hours per week.

PREREQUISITE: Registered Nurse or Licensed Practical Nurse. The Licensed Practical Nurse must have had experience working as a full-time employee in an intensive care unit or working in such a unit while attending the course.
CREDIT: Three semester hours.
OFFERED: F, SP

PHILOSOPHY

PHL 101. Introduction to Philosophy

An introduction to the objects, methods, and tasks of philosophy. This course considers three basic questions: What is philosophy? How is philosophy practiced? and, Why is philosophy practiced?

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

PHL 102. Ethics

An examination of moral principles and moral issues. The course focuses upon the nature and the ground of moral obligation. It introduces major ethical systems and tests those against selected contemporary moral problems.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

PHL 103. Philosophy of Religion

A study of the nature and object of religious belief. Attention will be given to the following: the relation between faith and reason, the relation between religion and culture, the problem of evil, and the analysis of religious language.

PREREQUISITE: None*
CREDIT: Three semester hours.
OFFERED: F, SP

* PHL 104. Death and Dying

Personal attitudes toward death and the role of death in society are the focus of study and discussion. The adjustment of the individual to the acceptance of death and the development of better understanding of death are the major features of this course.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

PHL 105. Logic

A study of the methods and principles used to recognize, analyze, and evaluate arguments. The course focuses upon practical reasoning in natural language, although some formal methods of evaluating arguments will be introduced.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

* Note: This course cannot be applied to the general education humanities requirements for the A.A. and A.S. degrees.

Steve Rhoades, English, Literature and Philosophy Instructor.

PHYSICAL EDUCATION CO-EDUCATIONAL

PEC 100. Tennis and Badminton

A co-educational course in the techniques of tennis and badminton.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F, SP

PEC 101. Archery and Golf

A course in the skills, strategies, and rules of archery and golf.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F, SP

PEC 102. Fencing and Bowling

A course in the skills, strategies, and rules of fencing and bowling. The bowling will be done at a local bowling alley.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: V

PEC 103. Recreational Games

A course in which students will participate in a variety of leisure activities. Games and activities involving individuals, partners, and small groups will be included. Such activities as badminton, horseshoes, bowling, and shuffleboard will be included.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: V

PEC 106. Racquetball

A course designed to teach the skills and strategy of playing racquetball. The class will meet at a local racquetball club, and there will be an additional fee charged to play.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F, SP

PEC 204. Camping

A course designed to acquaint the student with the skills and equipment used in camping. Eight hours will be spent in the classroom and one weekend will be spent camping at a local camping area. Students will be expected to supply their own food and camping equipment and pay their own camping fees.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: SP

PEC 205. Volleyball and Softball

A co-educational course in the techniques of volleyball and softball.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F, SP

PHYSICAL EDUCATION – MEN

PEM 100. Weight Training and Conditioning

A course in techniques and methods of weight training and physical conditioning. Emphasis will be on the development of strength, muscular endurance, flexibility, and cardio-vascular endurance as elements of physical fitness.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F, SP

PEM 105. Touch Football, Soccer, and Basketball

A course in the team sports of touch or flag football, soccer, and basketball. Skills, rules, and game strategy will be emphasized for each activity.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F

PEM 200. Advanced Weight Training and Conditioning

A course in advanced techniques and methods of weight training and physical conditioning. Emphasis will be on power lifting and olympic weight lifting techniques.

PREREQUISITE: PEM 100.
CREDIT: One semester hour.
OFFERED: F, SP

PHYSICAL EDUCATION: PROFESSIONAL

PEP 101. Badminton

A course for physical education majors dealing with the theory and practice of the fundamental skills used to play badminton.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F

PEP 102. Golf

A course for physical education majors dealing with the theory and practice of the fundamental skills used to play golf.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: SP

PEP 103. Tennis

A course for physical education majors dealing with the theory and practice of the fundamental skills used to play tennis.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F

PEP 200. Basketball

A course for physical education majors dealing with the theory and practice of the fundamental skills used to play basketball.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F

PEP 203. Volleyball

A course for physical education majors dealing with the theory and practice of the fundamental skills used to play volleyball.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: SP

PEP 204. Softball

A course for physical education majors dealing with the theory and practice of the fundamental skills used to play softball.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: SP

PHYSICAL SCIENCE

PSC 100. Introduction to Physical Science

The course surveys the fundamental concepts of Physics, Chemistry, and Earth Science. A non-mathematical approach is used where possible. The course is intended for non-science majors and does not serve as a prerequisite for any advanced science course. Three lectures per week.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP, SU

PHYSICS

The course descriptions in physics include guidelines for the student as to the laboratory time required. The laboratory is an open lab (unscheduled, except for PHY 120 and 121) and is available to the students with an instructor present as posted. The student is expected to plan for time in the laboratory so that the necessary experimental work can be completed.

PHY 109. General Physics (Mechanics)- Engineering

This course is for students in chemistry, engineering, and physics. This course includes forces, motion, work and energy, circular and harmonic motion. Lecture, two hours per week; seminar, one hour per week; laboratory, three hours per week.

PREREQUISITE: Credit or registration in MTH 200.
CREDIT: Four semester hours.
OFFERED: SP

PHY 120. Applied Physics I

The topics covered include measurement; mechanics including concepts of force, motion, work, energy, power, vectors, friction, simple machines and torque. Lecture, two hour per week; laboratory, two hours per week.

PREREQUISITE: Credit in MTH 128 or the equivalent.
CREDIT: Three semester hours.
OFFERED: SP

PHY 121. Applied Physics II

Topics covered include gases, heat, harmonic motion and waves, sound, light and optics; atomic and nuclear physics. Lecture, two hours per week; laboratory, two hours per week.

PREREQUISITE: PHY 120.
CREDIT: Three semester hours.
OFFERED: F

PHY 200. General Physics (Heat, Wave Motion, Sound and Electricity) - Engineering

This course is for students in chemistry, engineering and physics. The course includes the concepts of temperature, heat, molecular properties of matter, concepts of waves and wave motion, vibrating bodies, electric fields, DC current and circuits. Lecture, two hours per week; seminar, one hour per week; laboratory, three hours per week.

PREREQUISITE: PHY 109 and credit or registration in MTH 201.
CREDIT: Four semester hours.
OFFERED: F

PHY 201. General Physics (Electricity, Magnetism, Light, and Modern Physics) - Engineering

This course is for students in chemistry, engineering and physics. This course includes the concepts of magnetic field, AC current and circuits, electromagnetic waves, light, optics, atomic and nuclear physics. Lecture, two hours per week, seminar, one hour per week, laboratory, three hours per week.

PREREQUISITE: PHY 200.
CREDIT: Four semester hours.
OFFERED: SP

PHY 203. General Physics (Mechanics, Heat, Waves, Motion and Sound) - LAS

This course is for students in the Arts and Sciences. (Not for chemistry, engineering, or physics majors.) This course includes the

basic concepts of force and motion, energy and momentum, properties of matter, heat and thermodynamics, wave motion, and sound. Lecture, three hours per week; seminar, one hour per week. open laboratory, three hours per week required;

PREREQUISITE: MTH 105 or equivalent.
CREDIT: Five semester hours.
OFFERED: F

PHY 204. General Physics (Electricity, Magnetism, Light, Atomic & Nuclear Physics) - LAS

This course is for students in the Arts and Sciences. (Not for chemistry, engineering, or physics majors.) This course includes the concepts of light and optics, electricity and magnetism, and atomic and nuclear physics. Lecture, three times per week; seminar, one hour per week; open laboratory, three hours per week required.

PREREQUISITE: PHY 203.
CREDIT: Five semester hours.
OFFERED: SP

POLITICAL SCIENCE

PSI 100. American National Government

This course is a basic survey of American national government. A variety of topics concerning our political system will be studied, with emphasis placed not only on the institutions themselves, but also the results of the interactions of people and groups inside and outside the governing process.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

PSI 102. State & Local Government

A study of the role of state and local governments in the federal system, emphasizing the organizational structure as well as the political operations of these governments. The Illinois state constitution is also studied.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

PSI 120. Personal & Family Law

Personal and family rights are examined in the context of legislative, administrative, and court impacts. Marriage, divorce, adoption, mental health, education, support, paternity, juvenile, criminal, property and estates; these and other contemporary issues are surveyed. A basic understanding of our court system is provided.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

PSI 200. International Relations

This course explores the relationships which nations have with each other in the international community. It examines the role that power, warfare, diplomacy, and other actions have in enabling countries to achieve their foreign policy goals. Emphasis is placed on current international events.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

PSYCHOLOGY

PSY 100. General Psychology

An introductory course dealing with analysis and description of human behavior with special reference in learning, memory, thinking, emotional life, and personality development. Emphasis on psychological principles as they relate to daily life.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

PSY 110. Industrial Psychology

An introductory course dealing with the application of psychological facts and principles to the problems of human relations in business and industry. Emphasis will be placed upon personnel-related considerations and problems.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

PSY 130. Dieting: The Psychology of Losing It

A lecture and discussion class dealing with psychological principles involved in over-eating and dieting. Student participation in a personally designed program is optional and subject to the approval of a physician.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: On demand.

PSY 200. Personality & Adjustment

This course is designed to provide a meaningful approach to problems of human adjustment. Considerable emphasis will focus on personality theories, adjustive and coping behaviors, maladjustive behaviors, stress, and current topical issues.

PREREQUISITE: PSY 100.
CREDIT: Three semester hours.
OFFERED: F, SP

PSY 201. Child Growth and Development

This course charts the physical, cognitive, and psychosocial growth and development from conception through adolescence. Theory, research, and practical application are emphasized. Opportunity to study children in a classroom is provided in this course.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: SP

PSY 205. Human Sexuality

An introductory course dealing with basic biological, psychological, and cultural aspects of human sexuality as they relate to daily life. Emphasis will be placed on psychological dimensions of sexuality to promote an increased personal understanding of sexual behavior.

PREREQUISITE: PSY 100 or consent of instructor.
CREDIT: Three semester hours.
OFFERED: F, SP

PSY 220. Human Relations in the World of Work

Designed specifically for students in one or two year vocational/technical programs, the course focuses on applied psychology related to the world of work. Attention is given to motivation, job-related problems, interpersonal relations on the job, and adjustment to typical stress situations. Attention is also given to the job selection and interview process. Instruction is directed towards the practical application of behavioral principles in a work setting.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP

Gilbert Meyer, Psychology Instructor.

PUBLIC WATER SUPPLY

PWS 120. Water Supply Operation I

This is an introductory course of water supply operations. The topics will include operation and maintenance of water distribution systems, chlorination, fluoridation and water supply math.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: V

READING

RED 090. Basic Reading Skills

Development of the reading skills basic to higher education. Instruction concentrates upon vocabulary and comprehension improvement with provisions for rectifying other forms of reading deficiency. The development of basic reading skills with the students' own textbook is stressed. The grade in this course is not computed in the graduation g.p.a.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

RED 091. Vocabulary/Spelling

This course is designed to develop vocabulary building skills and spelling proficiency. The specific needs of the student are determined through testing, referrals from instructors, and student's instructional program. The grade in this course is not computed in the graduation g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

RED 092. Test Taking and Study Techniques

This course will provide the student with skill development in time management, concentration, memory, and test taking through practical "how to" instruction along with practice. The skills are applied to courses being taken by the student. The grade in this course is not computed to the graduation g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

RED 093. Using Study Systems

This course will help the student develop a study system for reading textbooks and taking notes. SQ3R and the Cornell notetaking system will be used to increase comprehension and mastery of textbook reading assignments. Lecture notetaking techniques will be practiced. The grade in this course is not computed in the graduation g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

RED 094. Rate/Comprehension

This course will help the student understand what he reads and improve his reading rate. Different levels of comprehension skills will be used to determine the author's message. Practice in recognition of the main idea, supporting details, and organizational structure will be stressed. The grade in this course will not be computed in the graduation g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

RED 095. Reading Technical Documents

This course will help the student improve his reading in technical subjects such as beginning sciences, automotive mechanics, metallurgy, data processing, and electronics. Content of the course will include vocabulary development, reading comprehension, notetaking techniques, graphical comprehension, and following procedural directions. Direct application will be made to the student's technical text books. The grade in this course will not be computed in the g.p.a.

PREREQUISITE: None
CREDIT: One semester hour.
OFFERED: F, SP, SU

RED 096. Spelling

This course is designed to develop spelling proficiency. The specific needs of the student are determined through testing, referrals from instructors, and student's instructional program. The grade in this course will not be computed in the g.p.a.

PREREQUISITE: None
CREDIT: One semester hour
OFFERED: F, SP, SU

RED 108. Advanced Reading

This course is designed for students who want to improve their speed, flexibility, vocabulary, and comprehension in reading. Effective reading techniques will be practiced. Training in the discovery of fallacious reasoning, propaganda techniques, and other persuasive techniques will be given. The three primary objectives are to develop flexibility in reading methods, a college level vocabulary, and skill in making critical reading judgments.

PREREQUISITES: Total score of 65 on the Nelson Denny Form E reading Test or consent of instructor.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

RED 111. Study Skills

This course provides a practical approach to the introduction, adoption, and mastery of the common skills, habits, and/or techniques conducive to success in college. It is intended to help students "learn how to learn" through improvement in their ability to concentrate, manage their time, remember what has been read, take meaningful notes, take exams and develop other study techniques. The grade in this course is not computed in the graduation g.p.a.

PREREQUISITE: None
CREDIT: Two semester hours.
OFFERED: F, SP, SU

REAL ESTATE

The Division of Business offers real estate courses leading to both the salesman and brokerage licenses in real estate. Courses in these sequences meet the requirements of the Department of Registration and Education of the State of Illinois.

Sales License Course

To sit for the sales examination an individual must have completed the thirty (30) class hour Real Estate Transactions course. This course is listed in the Real Estate section of the catalogue as Real Estate 120. Anyone desiring to take the brokerage courses must have successfully completed RE 120.

Brokerage License Courses

To qualify for taking the brokerage examination an individual must have previously completed the thirty (30) hour Real Estate Transactions course plus an additional sixty (60) hours in the brokerage sequence.

Each course in the brokerage sequence is fifteen (15) class hours.

Two courses are required in this sequence: Contracts and Conveyancing and Advanced Real Estate Principles. Two other courses from among the following are then chosen as electives: Real Estate Appraisal, Property Management, Financing, Sales and Brokerage, Farm Management, Real Property Insurance, and Refresher Course for License Reinstatement. See the following Real Estate courses for exact course descriptions and course numbers.

RE 120. Real Estate Transactions

This course is designed to provide an Introduction to Real Estate

Transactions. Topics will cover: interests in real estate, estates in land, homestead, easements, how ownership is held, partition, and partnership. This course is graded on a pass-fail basis. Meets Department of Education and Registration requirements for taking the Real Estate Sales examination.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED F, SP

RE 121. Contracts & Conveyancing

Topics covered will be deeds, fixtures, acknowledgements, brokers and managers, contracts, foreclosure and redemptures, landlord and the tenant concepts. This course is graded on a pass-fail basis. A required course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED F, SP

RE 122. Advanced Real Estate Principles

This course will cover listings, title search, completion of contract form, broker relationship, Illinois Real Estate License Act of 1983, and completion of applications for licenses. This course is graded on a pass-fail basis. A required course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED F, SP

RE 123. Real Estate Appraisal

Topics covered will include: real estate property value, appraisal process, economic trends, basic property value principles, depreciation and obsolescence, future life estimates, and market approach to value. This course is graded on a pass-fail basis. An elective course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED On demand.

RE 124. Property Management

This course will cover property modernization, rental and expense schedule, financial structure and budget, leases, property insurance, purchasing, commercial property, industrial property, project management, management control and advertising. This course will be graded on a pass-fail basis. An elective course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: On semester hour.
OFFERED On demand.

RE 125. Financing

This course will cover types of financing, sources of financing, mortgages, trust deed, mortgage notes, prior liens, foreclosure, insurance, and mortgage risk. This course will be graded on a pass-fail basis. An elective course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED On demand.

RE 126. Sales and Brokerage

This course will cover: qualifications of the broker appraisal principles and methods, training and supervision of salesperson, types and sources of listings, and governmental regulations. This course will be graded on a pass-fail basis. An elective course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED On demand.

RE 127. Farm Management

This course will cover: inventorying the assets, methods of arm operation, budgeting cash flow planning, crop production, livestock production, and marketing. This course will be graded on a pass-fail basis. An elective course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED On demand.

RE 128. Real Property Insurance

This course will cover: the nature and functions of insurance, property insurance, dwelling coverage, homeowners' policy, burglary and theft insurance, private mortgage insurance, Commercial and industrial insurance. This course will be graded on a pass-fail basis. An elective course in the real estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED On demand.

RE 129. Refresher Course for License Reinstatement

This course will cover: review of Illinois Real Estate License Act of 1983, court decisions, broker-lawyer accord changes, contract law changes, transfer of title, and changes in taxes, liens, and enforcement. This course will be graded on a pass-fail basis. An elective course in the Real Estate brokerage sequence.

PREREQUISITE: RE 120.
CREDIT: One semester hour.
OFFERED On demand.

ROBOTICS APPLICATION TECHNOLOGY

RBA 120. Introduction to Robotics

This course will introduce the standard practices and techniques that should be employed in the isolation, evaluation, development, fabrication, installation, and monitoring of industrial robot applications. Industrial or educational experience in manufacturing is strongly recommended.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED F

RBA 222. Robot Applications Field Project

This course was developed specifically to provide answers to a battery of questions addressed directly to robot applications and installations. The objective of this course is to interact with the resource people and answer these questions. The major areas covered will be: defining the task, developing the plan, personnel and labor relations, installation, safety considerations, back-up and contingency plans, economic considerations, video tape, photography, report writing and documentations will be used. This course is competency based instruction. Lecture, one hour per week; laboratory, six hours per week.

PREREQUISITE: Second year standing or consent of instructor.
CREDIT: Four semester hours.
OFFERED SP

SOCIAL SCIENCE

SSI 220. American Institutions

A study of the effect of American social, economic, and political institutions upon the individual as a citizen and as a worker. The course dwells upon current local, national, and global problems viewed in the light of our political and economic heritage.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: On demand.

SOCIOLOGY

SOC 100. Introduction to Sociology

An introductory course dealing with basic principles, concepts, and terminology. Efforts will be made to develop sociological insights into

the study of man, society, and culture.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F, SP, SU

SOC 200. Social & Cultural Change

This course is an extension of the principles and concepts in Sociology with emphasis upon social and cultural change. The nature of social and cultural change is explored along with the major factors affecting change. Specific changes/problems in society will also be considered.

PREREQUISITE: SOC 100.
CREDIT: Three semester hours.
OFFERED: SP

William Uebel, Division Chairperson for Social Science and Public Services.

SPEECH/THEATRE

SPH 101. Fundamentals of Speech

A course in the fundamentals of speech presentation in audience situations with emphasis upon the development of effective organization, voice, and movements. Lecture, three hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

SPH 102. Discussion and Debate

Continuation of the study of speech in relation to contemporary life in the areas of public address, discussion and debate. Lecture, three hours per week.

PREREQUISITE: SPH 101, debate squad member, or permission of instructor.
CREDIT: Three semester hours.
OFFERED: F

SPH 105. Theatre Playhouse Production

The study and production of a major play, revue, and/or readers' theatre. All areas of production related to acting, technical work, business, and public relations will be dealt with as areas of specific assignments. The class meeting times will be arranged with the instructor for rehearsals and for independent work assignments.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP, SU

SPH 106. Acting

A first year course of basic skills in the art of acting in interpretation of roles. Lecture, three hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

SPH 201. Oral Interpretation

Intensive study of literary selections involving critical reading and interpretation of oral readings to audiences. Lecture, three hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: SP

SPH 202. Introduction to Theatre

A study of the origins and the development of theatre arts from primitive man to contemporary theatre movements. Representative examples of theatre from each period will be studied through readings and/or performances. The application of critical elements to a production will be used as a basis for the course. The course deals primarily with western world theatre with a brief presentation of theatre from the Middle and Far East.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: SP

SPH 205. Theatre Playhouse Production

A continuation of SPH 105. Lecture, one hour per week; laboratory, five hours per week.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

SPH 208. Introduction to Broadcast

A survey of the history of American radio and television broadcasting, comparative broadcasting systems, organization and operation of stations and networks, social and legal responsibilities of radio and television, codes and practices of broadcasting, and an introduction to radio and television audiences measurement and survey results and methods. The course also includes practical experience in radio and television production techniques and copywriting.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: V

SPH 209. Art of the Film

Background viewing, critiquing, lectures, discussions on history and appreciation of cinema as an art form and its influence on and reflection of society.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F, SP

WASTE WATER TREATMENT

WWT 120. Waste Water Treatment I

This course is designed as the first of a two-course sequence to prepare wastewater treatment plant operators for state certification. This course will train operators primarily for the Class 3 & 4 examinations although course content will apply to all certification levels. Topics covered will include: introduction to wastewater, collection systems, lift stations, flow measurement, pretreatment, primary treatment, stabilization ponds, intermittent sand filters, chemical feeders, sampling and legal requirements, chlorination, affect of discharges on receiving streams and basic applied Math.

PREREQUISITE: None
CREDIT: Three semester hours.
OFFERED: F

WWT 121. Waste Water Treatment II

This is the second of a two-course sequence to prepare wastewater treatment plant operators for state certification. This course will train operators primarily for the Class 1 & 2 examinations although course content will apply to all certification levels. Topics covered will include: activated sludge, digesters, tertiary treatment and

sludge handling.

PREREQUISITE: WWT 120.
CREDIT: Three semester hours.
OFFERED: SP

Betty Jo Hansen, Head Librarian.

WELDING

WLD 120. Stick, Plate Flat

Theory and practice in the preparation and welding of flat position steel plate joints using the E-6010 and E-7018 electrodes. Safety, electrode selection, polarity, current selection, inspection, and testing are included.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 121. Stick, Plate Horizontal

Theory and practice in the preparation and welding of horizontal position steel plate joints using the E-6010 and E-7018 electrode. Safety, joint preparation, and A.W.S. welding procedures will be stressed.

PREREQUISITE: WLD 120 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 122. Stick, Plate Vertical-Up

Theory and practice in the preparation and welding of vertical up position steel plate joints using the E-6010 and E-7018 electrode. Safety, joint preparation, weave techniques and A.W.S. welding procedures will be stressed.

PREREQUISITE: WLD 121 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 123. Stick, Plate Vertical-Down

The theory and practice in the preparation and welding of vertical down position steel plate joints using E-6010 and E-7010 electrodes. Safety, joint preparation, weave techniques and A.W.S. welding procedures are stressed.

PREREQUISITE: WLD 122 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 124. Stick, Plate Overhead

The theory and practice in the preparation and welding of overhead position steel plate joints using the E-6010 and E-7018 electrodes. Safety, joint preparation, weave techniques, stringer techniques, and A.W.S. welding procedures are stressed.

PREREQUISITE: WLD 122 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 125. TIG (Heliarc) Flat Plate

The theory and practice in the preparation and welding of flat position steel plate using the TIG method and appropriate filler material. Equipment set-up, current, adjustment, joint preparation, safety and A.W.S. procedures will be stressed.

PREREQUISITE: WLD 124 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 126. TIG (Heliarc) Horizontal Plate

The theory and practice in the preparation and welding of horizontal position steel plate using the TIG method and appropriate filler material. Safety, joint preparation, set-up, and A.W.S. procedures will be stressed.

PREREQUISITE: WLD 125 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 127. TIG (Heliarc) Vertical Plate

The theory and practice in the preparation and welding of vertical position steel plate using the TIG method and appropriate filler material. Safety, joint preparation, equipment set-up and A.W.S. procedures will be stressed.

PREREQUISITE: WLD 126 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 128. TIG (Heliarc) Overhead Plate

The theory and practice in the preparation and welding of overhead position steel plate using the TIG method and appropriate filler material. Safety, joint preparation, equipment set-up and A.W.S. procedures will be stressed.

PREREQUISITE: WLD 127 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 129. MIG (Wire) Flat Plate

The theory and practice in the preparation and welding of flat position steel plate using the solid core wire. Safety equipment set-up, travel direction, gun angle, weave and stringer techniques will be stressed.

PREREQUISITE: WLD 124 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 220. MIG (Wire) Horizontal Plate

The theory and practice in the preparation and welding of horizontal position steel plate using the solid core wire. Safety, equipment set-up, travel direction, gun angle, and A.W.S. procedures are stressed.

PREREQUISITE: WLD 129 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 221. MIG (Wire) Vertical Plate

The theory and practice in the preparation and welding of vertical position steel plate using the solid core wire. Safety, equipment set-up, and A.W.S. procedures will be stressed.

PREREQUISITE: WLD 220 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 222. MIG (Wire) Overhead Plate

The theory and practice in the preparation and welding of overhead position steel plate using the solid core wire. Safety, equipment set-up, gun angle, travel direction and A.W.S. procedures will be stressed.

PREREQUISITE: WLD 221 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 223. Stick, Pipe

Common pipe joints are prepared and welded in accordance with A.W.S. and ASME standards used in industry and construction. Position welds are accomplished in the 2G and 5G positions with the E-6010 and 7018 electrodes. 6G position may also be accomplished.

PREREQUISITE: WLD 124 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 224. TIG (Heliarc) Pipe

Common pipe joints are prepared and welded in accordance with A.W.S. and ASME standards used in industry and construction. Position welds are accomplished in the 2G and 5G positions with the E-6010 and 7018 electrodes. 6G position may also be accomplished.

PREREQUISITE: WLD 223 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 225. MIG (Wire) Pipe

Common pipe joints are prepared and welded in accordance with A.W.S. and ASME standards used in industry and construction. Position welds in the 2G and 5G positions are accomplished on steel pipe using mild steel filler material. 6G position may also be introduced.

PREREQUISITE: WLD 223 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 226. Gas WLD, Plate Flat and Horizontal

The course includes the theory, safety, and operation of oxy-acetylene welding and cutting equipment. The student will learn to produce quality welds and to braze joints in the flat and horizontal positions on steel plate.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 227. Gas WLD, Plate Vertical and Overhead

The course includes the theory and practice in the production of vertical and overhead welds. The student will learn proper joint preparation, torch methods and heat control to produce quality welds and braze joints on steel plate.

PREREQUISITE: WLD 226 or concurrent enrollment or consent of instructor.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WLD 228. A, B, C, D Welding for Apprentices

This course is made up of four major areas of welding each requiring 30 clock hours of instruction. The areas included are: arc welding (stick, flat and horizontal position), oxycetylene, and semi-automatic welding. .75 hours per week; laboratory, 1.5 hours per week for each section.

PREREQUISITE: Enrollment in an apprenticeship program.
CREDIT: Six semester hours.
OFFERED: F

WELDING DESIGN THEORY

WDT 120. Welding Theory I

This course is designed to inform and prepare the student in the safe operation, set-up and handling of the materials and equipment used in oxyacetylene cutting and welding, shield metallic arc, MIG, TIG, and special welding processes.

PREREQUISITE: None.
CREDIT: One semester hour.
OFFERED: F

WDT 121. Welding Theory II

This course is designed to inform and prepare the student in interpretation of the welding code procedure, welding power source principles, welding cost estimating, resistance welding processes, and basic trouble shooting.

PREREQUISITE: WDT 120.
CREDIT: One semester hour.
OFFERED: SP

WELDING QUALIFICATION TESTS

WQT 120. Stick Welding Test Flat Plate

The student will arc weld steel plate in the flat position, cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 120 or consent of instructor.
CREDIT: 3/4 semester hours.
OFFERED: F, SP, SU

WQT 121. Stick Welding Test Horizontal Plate

The student will arc weld steel plate in the horizontal position with E-6010 and E-7018 electrodes; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 121 or consent of instructor.
CREDIT: 3/4 semester hours.
OFFERED: F, SP, SU

WQT 122. Stick Welding Test Vertical-Up Plate

The student will arc weld steel plate in the vertical up position with E-6010 and E-7018 electrodes; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 122 or consent of instructor.
CREDIT: 3/4 semester hours.
OFFERED: F, SP, SU

WQT 123. Stick Welding Test Vertical-Down Plate

The student will arc weld steel plate in the vertical down position with E-6010 and E-7018 electrodes; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 123 or consent of instructor.
CREDIT: 3/4 semester hours.
OFFERED: F, SP, SU

WQT 124. Stick Welding Test Overhead Plate

The student will arc weld steel plate in the overhead position with E-6010 and E-7018 electrodes; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 124 or consent of instructor.
CREDIT: 3/4 semester hours.
OFFERED: F, SP, SU

WQT 125. TIG Welding Test Flat Plate

The student will TIG weld steel plate in the flat position; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 125 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 126. TIG Welding Test Horizontal Plate

The student will TIG weld steel plate

in the horizontal position; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 126 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 127. TIG Welding Test Vertical Plate

The student will TIG weld steel plate in the vertical position, cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 127 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 128. TIG Welding Test Overhead Plate

The student will TIG weld steel plate in the overhead position; cut, grind, and prepare straps for a root and face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 128 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 129. MIG Welding Test Flat Plate

The student will MIG weld steel plate in the flat position; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 129 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 220. MIG Welding Test Horizontal Plate

The student will MIG weld steel plate in the horizontal position; cut, grind, and prepare straps for a root and face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 220 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 221. MIG Welding Test Vertical Plate

The student will MIG weld steel plate in the vertical position; cut, grind and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 221 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 222. MIG Welding Test Overhead Plate

The student will MIG weld steel plate in the overhead position; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 222 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 223. Stick Pipe Test

The student will arc weld steel pipe with E-6010 and E-7018 electrodes; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1 and American Society of Mechanical Engineers Code.

PREREQUISITE: Credit or concurrent enrollment in WLD 223 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 224. TIG Pipe Test

The student will TIG weld steel pipe; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1 and American Society Mechanical Engineers Code.

PREREQUISITE: Credit or concurrent enrollment in WLD 224 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 225. MIG Pipe Test

The student will MIG weld steel pipe; cut, grind, and prepare straps for a root and a face bend test as specified in the American Welding Society Structural Welding Code, D1.1 and American Society Mechanical Engineers Code.

PREREQUISITE: Credit or concurrent enrollment in WLD 225 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WQT 226. Gas WLD Test Flat and Horizontal Plate

The student will gas weld steel plate in the flat and in the horizontal positions; cut, grind, and prepare straps for a root and face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 226 or consent of instructor.
CREDIT: 3/4 semester hours.
OFFERED: F, SP, SU

WQT 227. Gas WLD Test Overhead and Vertical Plate

The student will gas weld steel plate in the vertical and overhead positions; cut, grind, and prepare straps for a root and face bend test as specified in the American Welding Society Structural Welding Code, D1.1.

PREREQUISITE: Credit or concurrent enrollment in WLD 227 or consent of instructor.
CREDIT: 3/4 semester hour.
OFFERED: F, SP, SU

WOODWORKING

WDW 110. Beginning Woodworking

This course is composed of basic instruction relating to the use of hand and power tools used in the wood industry. Emphasis is placed on planning, designing and constructing selected projects using developmental skill techniques.

PREREQUISITE: None.
CREDIT: Three semester hours.
OFFERED: F

WDW 111. Advanced Woodworking

A continuation of WDW 110 including instruction on portable power tools as well as stationary woodworking machines, namely: planer, jointer, table saw, band saw, shaper, router, scroll saw, etc. Emphasis will be on planning, designing and constructing selected projects using advanced millwork skills.

PREREQUISITE: WDW 110.
CREDIT: Three semester hours.
OFFERED: SP

WORD PROCESSING

WPR 120. Fundamentals of Office Systems

The aim of this course is to acquaint students with automated machines, supplies, procedures, and human relations in a business office as they relate to Word Processing. Advancements in the field of business and management and work simplification typical of both small and large business offices will be examined.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F, SP

WPR 121. Word Processing I

An introductory course in machine transcription. The student will learn to type business correspondence from transcription equipment. Proofreading tips will also be covered in this course. One hour of lecture, two hours of lab per week.

PREREQUISITE: BUE 107.
CREDIT: Two semester hour.
OFFERED: F, SP

WPR 122. Word Processing Applications

Basic instruction on text editing and related equipment used in Word Processing centers. Also, introduction of Word Processing terminology. Completion of various word processing exercises on the IBM Displaywriter and transcription equipment. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: BUE 107 or equivalent.
CREDIT: Two semester hours.
OFFERED: F, SP, SU

WPR 123. Advanced Text Editing

An advanced course using CRT equipment. The student will study advanced procedures used in word processing and will develop production level techniques on the CRT. The student will also learn to combine the skills of machine transcription and text editors. Lecture, one hour per week; laboratory, two hours per week.

PREREQUISITE: WPR 122.
CREDIT: Two semester hours.
OFFERED: F, SP

WPR 124. Records Processing and File Design

The student will learn to create, use, and maintain files on a word processor. The student will also learn to design letters and reports using information from the files. The IBM Displaywriter and Reportpack will be used for this class. The student should be thoroughly familiar with text editing before entering this class.

PREREQUISITE: WPR 123.
CREDIT: Two semester hours.
OFFERED: SP

WPR 125. Information Processing and Systems Administration

Advanced application of word processing including such areas as system administration concepts, electronic mail, creating and maintaining libraries on the Wang, and communicationS features. The student will also create and use glossary on the Wang. Lecture, one hour per week; lab, two hours per week.

PREREQUISITE: WPR 123
CREDIT: Two semester hours.
OFFERED: F, SP

ZOOLOGY

ZOO 104. General Zoology

A comparative study of animal life from the protozoans through the chordates. Anatomy, physiology, and evolution will be stressed. Lecture, two hours per week; seminar, one hour per week; laboratory, three hours per week.

PREREQUISITE: BIO 101, or BIO 103, or BOT 109, or ZOO 107.
CREDIT: Four semester hours.
OFFERED: SP

ZOO 107. Anatomy & Physiology I

This course encompasses the structural composition of man and the functional operation of these structures. The complexity of these components are first studied separately as organ systems, and then throughout the course integrated into a structural and functional understanding of the whole organism. Laboratory exercises emphasize the anatomical aspects of man using the adult cat as a dissection specimen, along with other preserved material, microscope slides, charts, and models. Lecture focuses primarily upon physiological processes, while seminar periods are used to reinforce both lecture and lab material. Cytology, histology, and five major systems--skeletal, muscular, nervous, integumentary, and endocrine are studied. Lecture, two hours per week; laboratory, three hours per week; seminar, one hour per week.

PREREQUISITE: None
CREDIT: Four semester hour.
OFFERED: F, SU

ZOO 108. Anatomy & Physiology II

A continuation of ZOO 107, this course completes the study of the structural and functional aspects of the human body. Five major systems--reproductive, circulatory, respiratory, digestive, and excretory are studied, with special emphasis given to the topics of metabolism, fluid electrolyte balance, and acid-base balance. Lecture, two hours per week; laboratory, three hours per week; seminar, one hour per week.

PREREQUISITE: ZOO 107 or consent of instructor.
CREDIT: Four semester hours.
OFFERED: SP

ZOO 120. Human Body Structure and Function

This course will emphasize the anatomy (structure) and physiology (function) of the human body. Class sessions will include lectures, demonstrations, and discussions which concentrate on how the body is constructed and how it functions.

PREREQUISITE: None.
CREDIT: Two semester hours.
OFFERED: F, SU

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DISCLAIMER

Information contained in the 1985-87 edition of the Catalog was, to the best knowledge of the Illinois Valley Community College staff, considered correct and complete when submitted to the publisher in April, 1985. However, this catalog should not be considered a contract between Illinois Valley Community College and any student. Illinois Valley Community College reserves the right to make changes in tuition, fees, admissions, regulations, and curriculum without notice or obligation.

IVCC is an affirmative action/equal opportunity institution.

IVCC does not discriminate on the basis of handicap in the recruitment or admission of students and it complies fully with Section 504 of the Rehabilitation Act of 1973.

Illinois Valley COMMUNITY COLLEGE
2578 E. 350TH RD., OGLESBY, IL 61348-1099
TELEPHONE: 815-224-2720

APPLICATION FOR ADMISSION

WELCOME!

We are very pleased that you are interested in admission to I.V.C.C. Your admission application with general information is provided to help you in the admission process. For additional information, please consult the current college catalog or contact us at the phone numbers listed at the bottom of this page.

Your Admission

You may be admitted as either a **Degree or Certificate Seeking Student** or as a ***Student-At-Large***. A Degree or Certificate Seeking Student is one who is working towards graduation in one of the college's degree or certificate programs. A Degree or Certificate Seeking Student may be enrolled either full-time or part-time.

A Student-At-Large is one who is taking courses to fit his or her individual needs and interests. A Student-At-Large is not a candidate for a degree or certificate, but may later qualify by fulfilling the admission requirements for a Degree or Certificate Seeking Student. Credits earned as a Student-At-Large may be applied toward a degree or certificate.

How To Apply

To apply for admission as a Degree or Certificate Seeking Student you must submit:

- √ Admission application.
- √ Official transcript of high school record indicating graduation (if appropriate), or official transcripts of high school equivalency scores (G.E.D.).
- √ Official transcripts from any and all colleges attended.

To apply for admission as a Student-At-Large you must submit:

- √ Admission application.
- ____ No other documentation is necessary for admission as a Student-At-Large.

Where To Apply

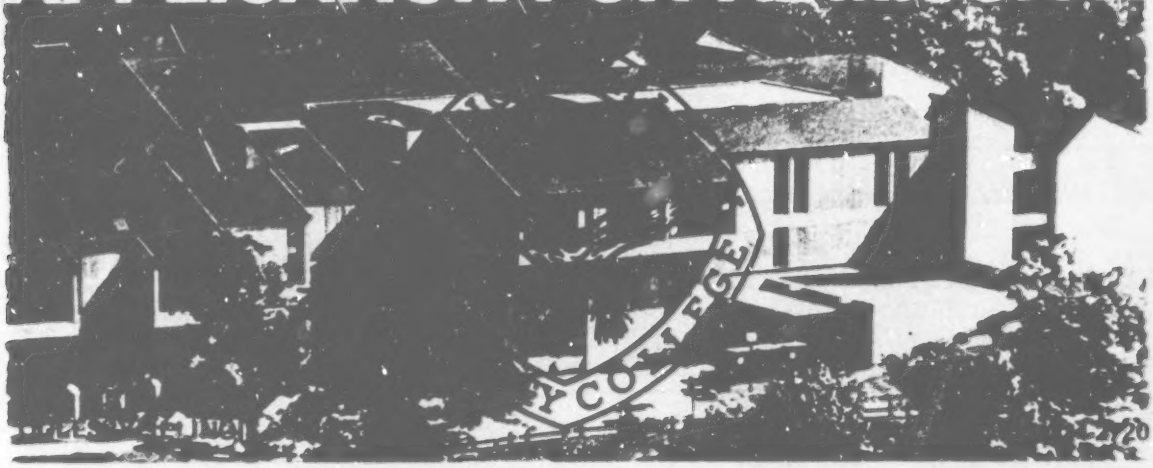
Bring your application to the campus, or mail your application to the Admissions Office at the address listed below. If you are applying as a Degree or Certificate Seeking Student, be sure to have official transcripts sent directly to us or include them with your application.

Admissions Office
Illinois Valley Community Coilege
2578 E. 350th Rd.
Oglesby, IL 61348-1099

IF YOU HAVE ANY QUESTIONS CALL US AT (815) 224-2720.....

Admissions, Ext. 439 — **Counseling,** Ext. 360 — **Financial Aid,** Ext. 440

ILLINOIS VALLEY COMMUNITY COLLEGE
APPLICATION FOR ADMISSION



***TRANSFER DEGREE PROGRAMS (ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE)**

Agriculture - 1001
Art - 1004
Biology - 2020
Business Administration - 1002
Business Education - 1020
Chemistry - 2020
Computer Science- 2170
Criminal Justice - 1167
Elementary Education (A.A.) - 1011
Elementary Education (A.S.) - 2011
Engineering - 2003
English - 1020
Foreign Languages - 1020
Forestry - 2020
Geography - 2020
History - 1020
Home Economics - 1020
Mathematics - 2020
Medical Technology - 2020
Music - 1020
Phys. Educ. Men - 1020
Phys. Educ. Women - 1020
Physical Therapy - 2020
Pre-Dentistry - 2021
Pre-Law - 1022
Pre-Medicine - 2023
Pre-Nursing - 2024
Pre-Pharmacy - 2025
Pre-Veterinary - 2026
Political Science - 1020
Psychology - 1020
Recreational Leadership - 1020
Secondary Education (A.A.) - 1012
Secondary Education (A.S.) - 2012
Special Education (A.A.) - 1013
Special Education (A.S.) - 2013
Speech - 1005
Speech Therapy - 2020
Theatre - 1020

CAREER/VOCATIONAL DEGREE PROGRAMS (ASSOCIATE IN APPLIED SCIENCE)

Accounting - 3058
Agribusiness Production and Management - 3053
Agribusiness Supply and Service - 3041
Agri-Mechanics - 3165
Auto Mechanics - 3051
Business Data Processing - 3042
Child Care - 3057
Criminal Justice - 3044
Electronics Technology - 3043
Electronics Technology Microprocessor Option - 0035
Engineering Design Tech. - 3049
Industrial Supervision
Marketing - 3050
Mechanical Tech. Production - 3046
Mechanical Tech. Robotics Option - 0033
Mid-Management - 3072
Nursing, Registered - 3047
Secretarial Science - 3048

CAREER/VOCATIONAL CERTIFICATE PROGRAMS

Accounting, Basic - 0157
Accounting, Intermediate - 0158
Accounting, Advanced - 0159
Agribusiness Production & Management - (Pending Approval)
Agribusiness Supply & Service - (Pending Approval)
Agri-Mechanics - 0121
Auto Mechanics - 0070
Clerical - 0061
Computer Operation - 0160
Computer Programming - 0161
Criminal Justice - 0065
Dental Assisting - 0059
Drafting - 0087
Fire Science - 0068
Industrial Electrician - 0062
Industrial Maintenance Mechanics- 0063
Machine Design - 0091
Manufacturing Processes - 0086
Micro-Computers - 0171
Nursing Assistant - 0166
Nursing, Licensed Practical - 0065
Tool and Diemaker Apprenticeship - 0164
Welding - 0066
Word Processing - 0154
Word Processing Systems Management - 0156

*Other Majors Are Available - Consult One of Our Counselors to Formulate the Appropriate Coursework.

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APPLICATION FOR ADMISSION

IVCC

SOCIAL SECURITY NUMBER - -

TERM APPLYING FOR: ____FALL, 19____ ____SPRING 19____ ____SUMMER 19____

LEGAL NAME: LAST FIRST MIDDLE (FULL) MAIDEN

ADDRESS: NUMBER/STREET CITY COUNTY STATE ZIP CODE

( ) Area Code HOME PHONE NO. | WORK PHONE | CITY AND STATE OF BIRTH | BIRTHDATE: MO. DAY YR. | SEX ___MALE ___FEMALE

RACE: ____ WHITE ____ BLACK ____ HISPANIC ____ ASIAN OR PACIFIC ISLANDER ____ AMERICAN INDIAN ____ NON-RESIDENT ALIEN ____ REFUSE TO INDICATE

U.S. CITIZEN: ____ YES ____ NO

HIGH SCHOOL LAST ATTENDED:

NAME: _____

CITY: _____

STATE: _____ ZIP CODE _____

HIGH SCHOOL GRADUATION STATUS:

____ I GRADUATED MO. ____ YR. ____

____ I FINISHED GED MO. ____ YR. ____

____ I AM STILL IN HIGH SCHOOL BUT WILL GRADUATE MO. ____ YR. ____

____ I WITHDREW FROM HIGH SCHOOL MO. ____ YR. ____

HAVE YOU EVER TAKEN A CREDIT COURSE FROM IVCC OR LPO JUNIOR COLLEGE? ____YES ____NO

IF "YES" INDICATE LAST SEMESTER OF ATTENDANCE ____ SEMESTER 19__ YR.

NAME UNDER WHICH LAST ATTENDED (IF DIFFERENT FROM ABOVE): _____

LIST ALL COLLEGES ATTENDED OTHER THAN IVCC

NAME	CITY	STATE	FROM	TO
			19__	19__
			19__	19__
			19__	19__

CURRICULUM (SEE BACK PAGE) _____ NAME _____ CURRICULUM CODE NO.

I AM APPLYING AS: ____ A DEGREE OR CERTIFICATE SEEKING STUDENT ____ A STUDENT-AT-LARGE (INDIVIDUAL COURSES OF INTEREST)

MY PRIMARY OBJECTIVE AT IVCC IS (CHECK ONE):

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____ PERSONAL INTEREST OR SELF DEVELOPEMENT

____ PREPARE FOR HIGH SCHOOL DIPLOMA EQUIVALENCY

____ OTHER OR UNKNOWN

NAME OF PARENT, GUARDIAN OR SPOUSE: _____ LAST FIRST

_____ NUMBER/STREET CITY STATE ZIP CODE AREA/CODE/PHONE NO.

I CERTIFY THAT I AM A LEGAL RESIDENT OF DISTRICT 513: ____YES ____NO

I UNDERSTAND THAT IF I WITHHOLD OR GIVE FALSE INFORMATION ON THIS APPLICATION IT MAY MAKE ME INELIGIBLE FOR ADMISSION TO THE COLLEGE OR SUBJECT ME TO DISMISSAL. I FURTHER CERTIFY THAT THE ABOVE STATEMENTS ARE COMPLETE AND CORRECT.

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_____ SIGNATURE

_____ DATE

CAREER PLANNING INFORMATION SECTION

This section of the catalog has been organized to assist those students and adults who are undecided as to a career choice or career change. The college programs on these pages are organized to correspond with the scores one might obtain from the Strong-Campbell Vocational Interest Blank of the Holland Self-Directed Search (SDS). Copies of these interest inventories may be obtained from the college counselors. An appointment to have an individual's scores interpreted as they relate to career choice and I.V.C.C.'s programs may be scheduled by calling the counseling department at (815) 224-2720.

	I.V.C.C. CERTIFICATE PROGRAMS		I.V.C.C (A.A.S.) TWO-YEAR APPLIED DEGREE PROGRAMS		I.V.C.C. (A.A. & A.S.) TWO-YEAR TRANSFER DEGREE PROGRAMS	
	HOC*	Catalog Page		Catalog Page		Catalog Page
R	RIE Agribusiness	80,82	RIE Agrimechanics	83	RSE Criminal Justice (Pre)	48
	RIE Agrimechanics	84	RIE Automotive Mechanics	85	RIS Forestry (Pre)	56
	RSE Criminal Justice	93	RSE Criminal Justice	93		
	RIE Fire Science	97	RIE Fire Science	97		
	RIS Industrial Electricians	98	RIE Mechanical Engineering Technology	100		
	RIS Welding	110				
I			IRE Electronic Technology	96	ISR Biology (Pre)	43
			ISA Medical Laboratory Technician	116	IAR Chemistry (Pre)	45
			IRS Medical Radiography	115	IRC Computer Programmer (Pre)	47
			IRE Microprocessor Computer Technology	102	IRE Dentistry (Pre)	50
			IRC Mechanical Technology Robotic Applications	101	IRE Engineering (Pre)	53
					IRS Geography (Pre)	57
					IRA Geology (Pre)	58
					IRA Mathematics (Pre)	62
					ISA Medical Technology(Pre)	63
					ISA Medicine (Pre)	64
					IES Pharmacy (Pre)	68
					ISA Psychology (Pre)	71
					IRS Veterinary (Pre)	75
S	SAI Dental Assistant	94	S Child Care	88	SAI Elementary Education (Pre)	51
	SAI Nursing Assistant	108	SIA Nursing (R.N.)	105,106	SAE Foreign Languages Teacher (Pre)	51
					SEI History (Pre)	59
					SAE Home Economics (Pre)	60
					SIA Nursing (Pre)	67
					SRE Physical Education (Pre)	51
					SIR Physical Therapy (Pre)	69
					SIA Political Science (Pre)	70
					SEA Recreational Leadership (Pre)	72
					SIA Sociology (Pre)	73
					SAI Special Education (Pre)	51
					SAI Speech Therapy (Pre)	51
C	CER Accounting	78	CES Accounting	77	CER Computer Science (Pre)	47
	CSA Clerical	90	CER Business Data Processing	86		
	CER Computer Operation	92	CSA Secretarial Science	109		
	CER Micro-Computer	92				
	CSA Word Processing	112				
	CSA Word Processing Managment	113				
E			ERI Agribusiness Production and Management	74	ESA Agriculture Transfer (Pre)	40
			ECS Agribusiness Supply and Service	81	ESC Business (Pre)	44
			ES Marketing	99	EAS Law (Pre)	61
			ESC Mid-Management	103		
A					AIR Art (Pre)	41
					ASE English (Pre)	54
					ASE Foreign Languages Interpretor (Pre)	55
					ASI Music (Pre)	65
					AIS Theatre (Pre)	74

R = Theme (Realistic)
I = Theme (Investigative)
S = Theme (Social)
C = Theme (Conventional)
E = Theme (Enterprising)
A = Theme (Artistic)

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JUL 26 1985